

GenCore version 5.1.7  
 Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: February 17, 2006, 09:42:00 (without alignments)

96.114 Million cell updates/sec  
 (without alignments)

Title: US-10-717-243-59  
 Perfect score: 53  
 Sequence: 1 CACATGTAACAGACTCATTTGGC 28

Scoring table: BLOSUM62  
 Xgapext 0.0 , Xgapext 0.5  
 Ygapop 10.0 , Ygapext 0.5  
 Pgapop 6.0 , Pgapext 7.0  
 Delop 6.0 , Delext 7.0

Searched: 244313 seqs, 439378781 residues

Total number of hits satisfying chosen parameters:

4886326

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0 %

Maximum Match 0 %  
 Listing first 45 summaries

Command line parameters:  
 -MODEL:frame+ n2p model -DEV=x1P  
 -Q=/abes/ABSSWEB spool/US1017243/runat\_16022006\_160649\_2198/app\_query.fasta\_1  
 -DB=A\_Geneseq -QFORMAT=fastan -SUFFIX=X-rag -MINMATCH=0.1 -LOOPCFL=0  
 -UNITS-bits -START=1 -END=1 -MATRIX=Blosum62 -TRANS=human40\_cdi -LIST=45  
 -DOCALIGNN=1 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGNS=15 -MODE=LOCAL  
 -OUTFILEN=pro -NORM=ext -HEADSIZE=500 -MINLEN=0 -MAXLEN=20000000000 -HOST=absbs02P  
 -USER=US1017243\_GCGN\_1.1.348 -@runat\_16022006\_160649\_2198 -NCPU=6 -ICPU=3  
 -WARN TIMEOUT=30 -THREADS=1 -XGAPPOP=0 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
 -YGAPOP=10 -YGAPEXT=0.5 -DBLOP=6 -DELEXT=7

Database :

```
A_Geneseq 21:*
1: geneseqP19808:*
2: geneseqP19908:*
3: geneseqP20008:*
4: geneseqP20018:*
5: geneseqP20028:*
6: geneseqP20038:*
7: geneseqP20048:*
8: geneseqP20058:*
9: geneseqP20068:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	53	100.0	251	2	AAR63923	Arabidopsis Type I RI
C 2	45	84.9	132	3	AAG59355	Arabidopsis AAG59355
C 3	45	84.9	190	3	AAG59354	Arabidopsis AAG59354
C 4	45	84.9	196	3	AAG60327	Arabidopsis AAG60327
C 5	45	84.9	220	3	AAG59642	Arabidopsis AAG59642
C 6	45	84.9	257	3	AAG60333	Arabidopsis AAG60333
C 7	45	84.9	263	3	AAG60326	Arabidopsis AAG60326
C 8	45	84.9	286	3	AAG04861	Arabidopsis AAG04861
C 9	45	84.9	287	3	AAG59641	Arabidopsis AAG59641

RESULTS

ID AAR63923 standard; protein: 251 AA.

XX AAR63923;

AC AAR63923;

XX DT 25-MAR-2003 (revised)

DT 27-JUL-1995 (first entry)

XX DE Type I RIP gelonin analog Gel(C103).

XX KW Type I ribosome-inactivating proteins; RIPs; gelonin;

KW cytotoxic therapeutic agents; autoimmune disease; cancer;

KW graft-versus-host disease.

XX OS Gelonium multiflorum.

XX PN WO9426910-A1.

XX PR 12-MAY-1994; 93US-00064691.

XX PR 24-NOV-1994; 94WO-US005348.

XX PR 12-MAY-1994; 94WO-US005348.

#### ALIGNMENTS

RESULTS

1

ID AAR63923

XX

AC

XX

AC</p

XX PS Example 3; Page 187-188; 221pp; English.

CC AAR63912-R63924 are analogs of AAR63903 type I ribosome-inactivating protein (RIP) gelonin, one of the nine RIPs described in AAR63903-R63911.

CC RIPS are key components of cytotoxic therapeutic agents (CTAs), which include gene fusion products and immunoconjugates. CTAs may be used to selectively eliminate any cell type to which a RIP component is targeted, by the specific binding capability of the second component of the agent. They can be used in the treatment of diseases where the elimination of a particular cell type is desired, such as autoimmune disease, cancer and graft-versus-host disease. (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 251 AA;

Alignment Scores:	Length: 251
Pred. No.: 0.205	Matches: 9
Score: 53.00	Conservative: 0
Percent Similarity: 100.0%	Mismatches: 0
Best Local Similarity: 100.0%	Indels: 0
Query Match: 100.0%	Gaps: 0
DB: US-10-717-243-59 (1-28) x AAR63923 (1-251)	

Qy 2 ACATGAAACAGAGACTTCAATTGGC 28

Db 102 ThrCysLysThrArgLeuHisPheGly 110

RESULT 2

ID AAG55355 standard; protein; 132 AA.

XX AAG55355;

XX DT 18-OCT-2000 (first entry)

DE Arabidopsis thaliana protein fragment SEQ ID NO: 76769.

KW Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; termination sequence.

XX OS Arabidopsis thaliana.

XX PN EP1033405-A2.

XX PD 06-SEP-2000.

XX PF 25-FEB-2000; 2000EP-00301439.

XX PR 05-FEB-1999; 99US-0121825P.

PR 05-MAR-1999; 99US-0123180P.

PR 09-MAR-1999; 99US-0123548P.

PR 23-MAR-1999; 99US-0125788P.

PR 25-MAR-1999; 99US-0126564P.

PR 29-MAR-1999; 99US-0126785P.

PR 01-APR-1999; 99US-0127462P.

PR 06-APR-1999; 99US-0128234P.

PR 08-APR-1999; 99US-0128714P.

PR 16-APR-1999; 99US-0129845P.

PR 19-APR-1999; 99US-0130077P.

PR 21-APR-1999; 99US-0130449P.

PR 23-APR-1999; 99US-0130510P.

PR 28-APR-1999; 99US-0130891P.

PR 30-APR-1999; 99US-0132048P.

PR 04-MAY-1999; 99US-0132484P.

PR 06-MAY-1999; 99US-0132485P.

PR 06-MAY-1999; 99US-0132486P.

PR 06-MAY-1999; 99US-0132487P.

PR 07-MAY-1999; 99US-0132863P.

PR 11-MAY-1999; 99US-013256P.

PR 14-MAY-1999; 99US-013218P.

PR 14-MAY-1999; 99US-013219P.

PR 14-MAY-1999; 99US-013221P.

PR 18-MAY-1999; 99US-0134370P.

PR 19-MAY-1999; 99US-0134941P.

PR 20-MAY-1999; 99US-013524P.

PR 21-MAY-1999; 99US-0135353P.

PR 24-MAY-1999; 99US-0135629P.

PR 25-MAY-1999; 99US-0135021P.

PR 27-MAY-1999; 99US-0135392P.

PR 28-MAY-1999; 99US-0136782P.

PR 01-JUN-1999; 99US-0137222P.

PR 03-JUN-1999; 99US-0137528P.

PR 04-JUN-1999; 99US-0137502P.

PR 07-JUN-1999; 99US-0137724P.

PR 08-JUN-1999; 99US-013094P.

PR 10-JUN-1999; 99US-0135540P.

PR 10-JUN-1999; 99US-0133847P.

PR 14-JUN-1999; 99US-0133119P.

PR 16-JUN-1999; 99US-013452P.

PR 16-JUN-1999; 99US-013453P.

PR 17-JUN-1999; 99US-013492P.

PR 18-JUN-1999; 99US-013454P.

PR 18-JUN-1999; 99US-013455P.

PR 18-JUN-1999; 99US-013456P.

PR 18-JUN-1999; 99US-013457P.

PR 18-JUN-1999; 99US-013458P.

PR 18-JUN-1999; 99US-013459P.

PR 18-JUN-1999; 99US-013460P.

PR 18-JUN-1999; 99US-013461P.

PR 18-JUN-1999; 99US-013462P.

PR 18-JUN-1999; 99US-013463P.

PR 18-JUN-1999; 99US-013750P.

PR 18-JUN-1999; 99US-013763P.

PR 21-JUN-1999; 99US-013817P.

PR 22-JUN-1999; 99US-013899P.

PR 23-JUN-1999; 99US-014353P.

PR 24-JUN-1999; 99US-014695P.

PR 28-JUN-1999; 99US-014823P.

PR 29-JUN-1999; 99US-014991P.

PR 30-JUN-1999; 99US-014287P.

PR 01-JUL-1999; 99US-0142154P.

PR 02-JUL-1999; 99US-0142055P.

PR 06-JUL-1999; 99US-0143390P.

PR 08-JUL-1999; 99US-0142803P.

PR 09-JUL-1999; 99US-014287P.

PR 12-JUL-1999; 99US-014397P.

PR 13-JUL-1999; 99US-014542P.

PR 14-JUL-1999; 99US-014624P.

PR 15-JUL-1999; 99US-0144005P.

PR 16-JUL-1999; 99US-014085P.

PR 16-JUL-1999; 99US-014335P.

PR 19-JUL-1999; 99US-014331P.

PR 19-JUL-1999; 99US-014332P.

PR 19-JUL-1999; 99US-014333P.

PR 19-JUL-1999; 99US-014334P.

PR 19-JUL-1999; 99US-014335P.

PR 20-JUL-1999; 99US-014352P.

PR 20-JUL-1999; 99US-014632P.

PR 21-JUL-1999; 99US-0144884P.

PR 21-JUL-1999; 99US-0144814P.

PR 21-JUL-1999; 99US-0145086P.

PR 22-JUL-1999; 99US-0145085P.

PR 22-JUL-1999; 99US-0145087P.

PR 22-JUL-1999; 99US-0145089P.

PR 22-JUL-1999; 99US-0145192P.

PR 23-JUL-1999; 99US-0145145P. PR 22-OCT-1999; 99US-0160980P. PR 22-OCT-1999; 99US-0160981P. PR 22-OCT-1999; 99US-0160989P. PR 25-OCT-1999; 99US-0161404P. PR 25-OCT-1999; 99US-0161405P. PR 25-OCT-1999; 99US-0161406P. PR 26-OCT-1999; 99US-0161559P. PR 26-OCT-1999; 99US-0161360P. PR 26-OCT-1999; 99US-0161161P. PR 26-OCT-1999; 99US-0161620P. PR 28-OCT-1999; 99US-0161920P. PR 28-OCT-1999; 99US-0161922P. PR 28-OCT-1999; 99US-0161933P. PR 28-OCT-1999; 99US-0161934P. PR 29-OCT-1999; 99US-0162142P.

Alignment Scores:  
 Pred. No.: 7.38 Length: 132  
 Score: 45.00 Matches: 7  
 Percent Similarity: 100.0% Conservative: 1  
 Best Local Similarity: 87.5% Mismatches: 0  
 DB: 3 Indels: 0  
 Gaps: 0

US-10-717-243-59 (1-28) x AAG59355 (1-132)

Qy 25 AAAATGAGTCTTGTTTACATGT 2  
 DB 23 LysMethylAlaCysBenthCys 30

DB: 3

RESULT 3  
 AAG59354 ID AAG59354 Standard; protein; 190 AA.  
 XX AC AAG59354;  
 XX DT 18-OCT-2000 (First entry)  
 XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 76768.  
 XX KW Protein identification; signal transduction pathway; metabolic pathway;  
 XX KW hybridisation assay; genetic mapping; gene expression control; promoter;  
 XX KW termination sequence.  
 OS Arabidopsis thaliana.  
 XX PN EP1033405-A2.  
 XX PN 06-SEP-2000.  
 XX PP 25-FEB-2000; 2000EP-00301439.  
 PR 25-AUG-1999; 99US-0149722P.  
 PR 26-AUG-1999; 99US-0149723P.  
 PR 20-AUG-1999; 99US-0149929P.  
 PR 20-AUG-1999; 99US-0149930P.  
 PR 23-AUG-1999; 99US-0149931P.  
 PR 25-AUG-1999; 99US-0149932P.  
 PR 26-AUG-1999; 99US-0150884P.  
 PR 27-AUG-1999; 99US-0151065P.  
 PR 27-AUG-1999; 99US-0151066P.  
 PR 30-AUG-1999; 99US-0151088P.  
 PR 31-AUG-1999; 99US-0151438P.  
 PR 01-SEP-1999; 99US-0151930P.  
 PR 07-SEP-1999; 99US-0152363P.  
 PR 10-SEP-1999; 99US-0153070P.  
 PR 13-SEP-1999; 99US-0153750P.  
 PR 15-SEP-1999; 99US-0154018P.  
 PR 16-SEP-1999; 99US-0154039P.  
 PR 20-SEP-1999; 99US-0154779P.  
 PR 22-SEP-1999; 99US-0155139P.  
 PR 23-SEP-1999; 99US-0155486P.  
 PR 24-SEP-1999; 99US-0155655P.  
 PR 28-SEP-1999; 99US-0156455P.  
 PR 29-SEP-1999; 99US-0156598P.  
 PR 04-OCT-1999; 99US-0157117P.  
 PR 05-OCT-1999; 99US-0157753P.  
 PR 06-OCT-1999; 99US-0157865P.  
 PR 07-OCT-1999; 99US-0158029P.  
 PR 08-OCT-1999; 99US-0158232P.  
 PR 12-OCT-1999; 99US-0158368P.  
 PR 13-OCT-1999; 99US-0159299P.  
 PR 14-OCT-1999; 99US-0159631P.  
 PR 13-OCT-1999; 99US-0159299P.  
 PR 18-OCT-1999; 99US-0159584P.  
 PR 21-OCT-1999; 99US-0160741P.  
 PR 21-OCT-1999; 99US-0160767P.  
 PR 21-OCT-1999; 99US-0160768P.  
 PR 21-OCT-1999; 99US-0160770P.  
 PR 21-OCT-1999; 99US-0160814P.  
 PR 21-OCT-1999; 99US-0160815P.

PR	14-MAY-1999;	99US-0134218P.	99US-0145224P.
PR	14-MAY-1999;	99US-0134219P.	99US-0145226P.
PR	14-MAY-1999;	99US-0134221P.	99US-0145227P.
PR	14-MAY-1999;	99US-0134270P.	99US-0145139P.
PR	14-MAY-1999;	99US-0134370P.	99US-0145918P.
PR	18-MAY-1999;	99US-0134768P.	99US-0145919P.
PR	19-MAY-1999;	99US-0134941P.	99US-0145951P.
PR	20-MAY-1999;	99US-0135124P.	99US-0145386P.
PR	21-MAY-1999;	99US-0135353P.	99US-0145388P.
PR	24-JUN-1999;	99US-0135629P.	99US-0145389P.
PR	25-MAY-1999;	99US-0136021P.	99US-0145038P.
PR	27-MAY-1999;	99US-0136392P.	99US-0145204P.
PR	28-MAY-1999;	99US-0136782P.	99US-0145029P.
PR	01-JUN-1999;	99US-0137222P.	99US-0145192P.
PR	03-JUN-1999;	99US-0137528P.	99US-0145260P.
PR	04-JUN-1999;	99US-0137502P.	99US-0145310P.
PR	07-JUN-1999;	99US-0137724P.	99US-0145616P.
PR	08-JUN-1999;	99US-0138094P.	99US-0145493P.
PR	10-JUN-1999;	99US-0138540P.	99US-014535P.
PR	10-JUN-1999;	99US-0138678P.	99US-0145171P.
PR	14-JUN-1999;	99US-0139119P.	99US-0145319P.
PR	16-JUN-1999;	99US-0139452P.	99US-0145341P.
PR	16-JUN-1999;	99US-0139453P.	99US-0145656P.
PR	17-JUN-1999;	99US-0139492P.	99US-0145684P.
PR	18-JUN-1999;	99US-0139499P.	99US-0145688P.
PR	18-JUN-1999;	99US-0139445P.	99US-014575P.
PR	18-JUN-1999;	99US-0139456P.	99US-0145426P.
PR	18-JUN-1999;	99US-0139457P.	99US-0145722P.
PR	18-JUN-1999;	99US-0139458P.	99US-0145723P.
PR	18-JUN-1999;	99US-0139459P.	99US-0145929P.
PR	18-JUN-1999;	99US-0139460P.	99US-0145902P.
PR	18-JUN-1999;	99US-0139461P.	99US-0145930P.
PR	18-JUN-1999;	99US-0139462P.	99US-0150566P.
PR	18-JUN-1999;	99US-0139463P.	99US-015084P.
PR	18-JUN-1999;	99US-0139750P.	99US-0151065P.
PR	18-JUN-1999;	99US-0139763P.	99US-0151066P.
PR	21-JUN-1999;	99US-0139817P.	99US-0151080P.
PR	22-JUN-1999;	99US-0139899P.	99US-0151303P.
PR	23-JUN-1999;	99US-0140353P.	99US-0151438P.
PR	23-JUN-1999;	99US-0140354P.	99US-0151510P.
PR	24-JUN-1999;	99US-0140655P.	99US-0151363P.
PR	28-JUN-1999;	99US-0140823P.	99US-0151070P.
PR	29-JUN-1999;	99US-0140991P.	99US-0151758P.
PR	30-JUN-1999;	99US-0141287P.	99US-01514018P.
PR	01-JUL-1999;	99US-0141842P.	99US-0151039P.
PR	01-JUL-1999;	99US-0142154P.	99US-0151779P.
PR	02-JUL-1999;	99US-0142055P.	99US-015139P.
PR	06-JUL-1999;	99US-0142390P.	99US-015486P.
PR	08-JUL-1999;	99US-0142603P.	99US-015659P.
PR	09-JUL-1999;	99US-0142920P.	99US-015458P.
PR	12-JUL-1999;	99US-0144297P.	99US-015569P.
PR	13-JUL-1999;	99US-0144342P.	99US-015331P.
PR	14-JUL-1999;	99US-0144324P.	99US-015293P.
PR	15-JUL-1999;	99US-0144333P.	99US-015295P.
PR	16-JUL-1999;	99US-0144334P.	99US-015329P.
PR	19-JUL-1999;	99US-0144355P.	99US-015330P.
PR	20-JUL-1999;	99US-0144512P.	99US-015332P.
PR	20-JUL-1999;	99US-0144532P.	99US-015637P.
PR	20-JUL-1999;	99US-0144884P.	99US-015638P.
PR	21-JUL-1999;	99US-0144814P.	99US-015584P.
PR	21-JUL-1999;	99US-0145086P.	99US-016741P.
PR	21-JUL-1999;	99US-0145088P.	99US-016767P.
PR	22-JUL-1999;	99US-0145089P.	99US-016768P.
PR	22-JUL-1999;	99US-0145192P.	99US-016815P.
PR	23-JUL-1999;	99US-0145245P.	99US-016980P.
PR	23-JUL-1999;	99US-0145218P.	99US-016981P.

PR 22-OCT-1999; 99US-0160989P. PR 14-MAY-1999; 99US-0134221P.  
 PR 25-OCT-1999; 99US-0161040P. PR 14-MAY-1999; 99US-0134370P.  
 PR 25-OCT-1999; 99US-0161405P. PR 18-MAY-1999; 99US-0134768P.  
 PR 26-OCT-1999; 99US-0161140P. PR 19-MAY-1999; 99US-0134941P.  
 PR 26-OCT-1999; 99US-016159P. PR 20-MAY-1999; 99US-0135124P.  
 PR 26-OCT-1999; 99US-0161360P. PR 21-MAY-1999; 99US-0135353P.  
 PR 26-OCT-1999; 99US-011361P. PR 24-MAY-1999; 99US-0135629P.  
 PR 28-OCT-1999; 99US-0161940P. PR 25-MAY-1999; 99US-0135021P.  
 PR 28-OCT-1999; 99US-0161932P. PR 27-MAY-1999; 99US-0135392P.  
 PR 28-OCT-1999; 99US-0161933P. PR 28-MAY-1999; 99US-0135782P.  
 PR 29-OCT-1999; 99US-0162142P. PR 01-JUN-1999; 99US-0135222P.  
 PR 03-JUN-1999; 99US-0135028P.  
 PR 04-JUN-1999; 99US-0135150P.  
 PR 07-JUN-1999; 99US-0135724P.  
 PR 08-JUN-1999; 99US-0136094P.  
 PR 10-JUN-1999; 99US-0135450P.  
 PR 10-JUN-1999; 99US-0133847P.  
 PR 14-JUN-1999; 99US-0133911P.  
 PR 16-JUN-1999; 99US-0134522P.  
 PR 16-JUN-1999; 99US-013453P.  
 PR 17-JUN-1999; 99US-013492P.  
 PR 18-JUN-1999; 99US-013454P.  
 PR 18-JUN-1999; 99US-013455P.  
 PR 18-JUN-1999; 99US-013456P.  
 PR 18-JUN-1999; 99US-013457P.  
 PR 18-JUN-1999; 99US-013458P.  
 PR 18-JUN-1999; 99US-013459P.  
 PR 18-JUN-1999; 99US-013460P.  
 PR 18-JUN-1999; 99US-013461P.  
 PR 18-JUN-1999; 99US-013462P.  
 PR 18-JUN-1999; 99US-013463P.  
 PR 18-JUN-1999; 99US-013750P.  
 PR 18-JUN-1999; 99US-013763P.  
 PR 21-JUN-1999; 99US-013817P.  
 PR 22-JUN-1999; 99US-013899P.  
 PR 23-JUN-1999; 99US-014353P.  
 PR 23-JUN-1999; 99US-014354P.  
 PR 24-JUN-1999; 99US-014695P.  
 PR 28-JUN-1999; 99US-014823P.  
 PR 29-JUN-1999; 99US-014991P.  
 PR 30-JUN-1999; 99US-0141287P.  
 PR 01-JUL-1999; 99US-0141842P.  
 PR 01-JUL-1999; 99US-014154P.  
 PR 02-JUL-1999; 99US-0144055P.  
 PR 06-JUL-1999; 99US-0143390P.  
 PR 08-JUL-1999; 99US-0143803P.  
 PR 09-JUL-1999; 99US-0143920P.  
 PR 12-JUL-1999; 99US-0143977P.  
 PR 13-JUL-1999; 99US-014542P.  
 PR 14-JUL-1999; 99US-014624P.  
 PR 15-JUL-1999; 99US-0144005P.  
 PR 16-JUL-1999; 99US-0144085P.  
 PR 16-JUL-1999; 99US-0144086P.  
 PR 19-JUL-1999; 99US-0143352P.  
 PR 20-JUL-1999; 99US-0144632P.  
 PR 20-JUL-1999; 99US-0144331P.  
 PR 19-JUL-1999; 99US-0144332P.  
 PR 21-JUL-1999; 99US-0144814P.  
 PR 21-JUL-1999; 99US-0144334P.  
 PR 19-JUL-1999; 99US-0144335P.  
 PR 21-JUL-1999; 99US-0143085P.  
 PR 22-JUL-1999; 99US-0144087P.  
 PR 22-JUL-1999; 99US-0144884P.  
 PR 22-JUL-1999; 99US-0145089P.  
 PR 22-JUL-1999; 99US-0145145P.  
 PR 23-JUL-1999; 99US-0143218P.  
 PR 23-JUL-1999; 99US-0142242P.  
 PR 26-JUL-1999; 99US-0143276P.

---

Alignment Scores:  
 Pred. No.: 7.45 Length: 190  
 Score: 45.00 Matches: 7  
 Percent Similarity: 100.0% Conservative: 1  
 Best Local Similarity: 87.5% Mismatches: 0  
 Query Match: 84.9% Indels: 0  
 DB: 3 Gaps: 0

US-10-717-243-59 (1-28) x AAG59354 (1-190)

Qy 25 AAAATGAGTCCTGTACATGT 2  
 ID AAG60327 standard; protein; 196 AA.  
 XX  
 Db 81 LysMetLysAlaCysPheThrCys 88

RESULT 4  
 AAG60327  
 ID AAG60327 standard; protein; 196 AA.  
 AC  
 XX  
 DT 18-OCT-2000 (first entry)  
 XX Arabidopsis thaliana protein fragment SEQ ID NO: 78128.  
 DB  
 XX  
 KW Protein identification; signal transduction pathway; metabolic pathway;  
 hybridisation assay; genetic mapping; gene expression control; promoter;  
 termination sequence.  
 KW  
 XX  
 OS Arabidopsis thaliana.  
 XX  
 PN EP1033405-A2.  
 XX  
 PD 06-SEP-2000.  
 XX  
 PP 25-FEB-2000; 2000EP-00301439.  
 XX  
 PR 25-FEB-1999; 99US-0121825P.  
 PR 09-MAR-1999; 99US-0123180P.  
 PR 09-MAR-1999; 99US-0123548P.  
 PR 23-MAR-1999; 99US-0125788P.  
 PR 29-MAR-1999; 99US-0126284P.  
 PR 01-APR-1999; 99US-0127442P.  
 PR 23-APR-1999; 99US-013089P.  
 PR 06-APR-1999; 99US-0128234P.  
 PR 08-APR-1999; 99US-0128714P.  
 PR 16-APR-1999; 99US-0129845P.  
 PR 19-APR-1999; 99US-0130077P.  
 PR 21-APR-1999; 99US-0130449P.  
 PR 23-APR-1999; 99US-0130510P.  
 PR 01-MAY-1999; 99US-0132495P.  
 PR 06-MAY-1999; 99US-0132486P.  
 PR 06-MAY-1999; 99US-0132487P.  
 PR 07-MAY-1999; 99US-0132893P.  
 PR 11-MAY-1999; 99US-0134256P.  
 PR 14-MAY-1999; 99US-0134218P.  
 PR 14-MAY-1999; 99US-0134219P.

PR	27-JUL-1999;	99US-0145913P.	PR	25-OCT-1999;	99US-0161405P.
PR	27-JUL-1999;	99US-0145918P.	PR	25-OCT-1999;	99US-0161406P.
PR	27-JUL-1999;	99US-0145919P.	PR	26-OCT-1999;	99US-0161359P.
PR	28-JUL-1999;	99US-0145951P.	PR	26-OCT-1999;	99US-0161360P.
PR	02-AUG-1999;	99US-0146386P.	PR	26-OCT-1999;	99US-0161361P.
PR	02-AUG-1999;	99US-0146388P.	PR	28-OCT-1999;	99US-0161920P.
PR	03-AUG-1999;	99US-0146389P.	PR	28-OCT-1999;	99US-0161922P.
PR	04-AUG-1999;	99US-0147038P.	PR	28-OCT-1999;	99US-0161993P.
PR	04-AUG-1999;	99US-0147204P.	PR	29-OCT-1999;	99US-0161424P.
PR	05-AUG-1999;	99US-0147302P.	Alignment Scores:		Length: 196
PR	05-AUG-1999;	99US-0147302P.	Pred. No.:	7.46	Matches: 7
PR	06-AUG-1999;	99US-0147303P.	Score:	45.00	Conservative: 1
PR	09-AUG-1999;	99US-0147316P.	Percent Similarity:	100.0 %	Mismatches: 0
PR	09-AUG-1999;	99US-0147491P.	Best Local Similarity:	87.5 %	Indels: 0
PR	10-AUG-1999;	99US-0147935P.	Query Match:	84.9 %	Gaps: 0
PR	11-AUG-1999;	99US-0148171P.	DB:	3	
PR	12-AUG-1999;	99US-0148319P.			
PR	13-AUG-1999;	99US-0148365P.	US-10-717-243-59 (1-28) x AAG60327 (1-196)		
PR	16-AUG-1999;	99US-0148894P.	Qy	25 AAAATGAAGCTTGTGTTACAGT 2	
PR	17-AUG-1999;	99US-0149715P.	Db	81 LysMetLysAlaCysPheThrCys 88	
PR	18-AUG-1999;	99US-0149426P.			
PR	20-AUG-1999;	99US-0149722P.	RESULT 5		
PR	20-AUG-1999;	99US-0149723P.	AAG59642		
PR	20-AUG-1999;	99US-0149829P.	ID		
PR	23-AUG-1999;	99US-0149902P.	AAG59642 standard; protein; 220 AA.		
PR	23-AUG-1999;	99US-0149930P.	XX		
PR	25-AUG-1999;	99US-0150566P.	AC		
PR	26-AUG-1999;	99US-0150844P.	XX		
PR	27-AUG-1999;	99US-0151065P.	DT	18-OCT-2000 (first entry)	
PR	27-AUG-1999;	99US-0151066P.	XX		
PR	27-AUG-1999;	99US-0151068P.	DE		
PR	30-AUG-1999;	99US-0151303P.	XX		
PR	31-AUG-1999;	99US-0151438P.	KW	Arabidopsis thaliana protein fragment SEQ ID NO: 77166.	
PR	01-SEP-1999;	99US-0151910P.	KW	Protein identification; signal transduction pathway; metabolic pathway;	
PR	07-SEP-1999;	99US-0152363P.	KW	hybridisation assay; genetic mapping; gene expression control; promoter;	
PR	10-SEP-1999;	99US-0153070P.	KW	termination sequence.	
PR	13-SEP-1999;	99US-0153758P.	XX		
PR	15-SEP-1999;	99US-0154018P.	OS	Arabidopsis thaliana.	
PR	16-SEP-1999;	99US-0154039P.	XX		
PR	20-SEP-1999;	99US-0154779P.	XX		
PR	22-SEP-1999;	99US-0155139P.	XX		
PR	23-SEP-1999;	99US-0155407P.	XX		
PR	24-SEP-1999;	99US-0155659P.	XX		
PR	28-SEP-1999;	99US-01565158P.	25-FEB-1999		
PR	29-SEP-1999;	99US-0156596P.	PR	05-MAR-1999;	99US-0121825P.
PR	04-OCT-1999;	99US-0157117P.	PR	09-MAR-1999;	99US-0121548P.
PR	05-OCT-1999;	99US-0157753P.	PR	23-MAR-1999;	99US-0125788P.
PR	06-OCT-1999;	99US-0157865P.	PR	25-MAR-1999;	99US-0126264P.
PR	07-OCT-1999;	99US-0158029P.	PR	29-MAR-1999;	99US-0126785P.
PR	08-OCT-1999;	99US-0158332P.	PR	01-APR-1999;	99US-0127462P.
PR	12-OCT-1999;	99US-0158316P.	PR	06-APR-1999;	99US-0128234P.
PR	13-OCT-1999;	99US-0158293P.	PR	08-APR-1999;	99US-0128714P.
PR	14-OCT-1999;	99US-0159394P.	PR	16-APR-1999;	99US-0129845P.
PR	13-OCT-1999;	99US-0159395P.	PR	19-APR-1999;	99US-0130077P.
PR	14-OCT-1999;	99US-0159329P.	PR	21-APR-1999;	99US-0130449P.
PR	14-OCT-1999;	99US-0159310P.	PR	05-MAY-1999;	99US-0130510P.
PR	21-OCT-1999;	99US-0160768P.	PR	23-APR-1999;	99US-0132486P.
PR	21-OCT-1999;	99US-0160770P.	PR	06-MAY-1999;	99US-0132487P.
PR	21-OCT-1999;	99US-0160814P.	PR	07-MAY-1999;	99US-0132488P.
PR	21-OCT-1999;	99US-0160815P.	PR	11-MAY-1999;	99US-0132407P.
PR	22-OCT-1999;	99US-0160980P.	PR	04-MAY-1999;	99US-0132484P.
PR	22-OCT-1999;	99US-0160981P.	PR	05-MAY-1999;	99US-0132485P.
PR	22-OCT-1999;	99US-0160989P.	PR	06-MAY-1999;	99US-0132486P.
PR	25-OCT-1999;	99US-0161404P.	PR	14-MAY-1999;	99US-0134218P.
PR	25-OCT-1999;	99US-0161404P.	PR	14-MAY-1999;	99US-0134219P.
PR	25-OCT-1999;	99US-0161404P.	PR	14-MAY-1999;	99US-0134221P.
PR	25-OCT-1999;	99US-0161404P.	PR	14-MAY-1999;	99US-0134370P.

PR	18-MAY-1999;	99US-0134768P.	PR	27-JUL-1999;	99US-0145919P.
PR	19-MAY-1999;	99US-0134911P.	PR	28-JUL-1999;	99US-0145951P.
PR	20-MAY-1999;	99US-0135124P.	PR	02-AUG-1999;	99US-0145986P.
PR	21-MAY-1999;	99US-0135333P.	PR	02-AUG-1999;	99US-0145888P.
PR	22-MAY-1999;	99US-0135629P.	PR	02-AUG-1999;	99US-0145389P.
PR	23-MAY-1999;	99US-0136021P.	PR	03-AUG-1999;	99US-0145038P.
PR	24-MAY-1999;	99US-0136392P.	PR	04-AUG-1999;	99US-0145204P.
PR	25-MAY-1999;	99US-0136782P.	PR	04-AUG-1999;	99US-0145302P.
PR	26-MAY-1999;	99US-0137222P.	PR	05-AUG-1999;	99US-0145192P.
PR	01-JUN-1999;	99US-0137528P.	PR	05-AUG-1999;	99US-0145260P.
PR	03-JUN-1999;	99US-0137502P.	PR	06-AUG-1999;	99US-0145303P.
PR	04-JUN-1999;	99US-0137724P.	PR	06-AUG-1999;	99US-014516P.
PR	07-JUN-1999;	99US-0138094P.	PR	09-AUG-1999;	99US-0145493P.
PR	08-JUN-1999;	99US-0138540P.	PR	09-AUG-1999;	99US-0145368P.
PR	10-JUN-1999;	99US-0138544P.	PR	10-AUG-1999;	99US-0145171P.
PR	14-JUN-1999;	99US-0139119P.	PR	11-AUG-1999;	99US-0145319P.
PR	16-JUN-1999;	99US-0139412P.	PR	12-AUG-1999;	99US-0145341P.
PR	16-JUN-1999;	99US-0139433P.	PR	13-AUG-1999;	99US-0145565P.
PR	17-JUN-1999;	99US-0139492P.	PR	13-AUG-1999;	99US-0145684P.
PR	18-JUN-1999;	99US-0139454P.	PR	16-AUG-1999;	99US-0145175P.
PR	18-JUN-1999;	99US-0139455P.	PR	17-AUG-1999;	99US-0145171P.
PR	18-JUN-1999;	99US-0139456P.	PR	18-AUG-1999;	99US-0145426P.
PR	18-JUN-1999;	99US-0139457P.	PR	20-AUG-1999;	99US-0145722P.
PR	18-JUN-1999;	99US-0139458P.	PR	20-AUG-1999;	99US-0145723P.
PR	18-JUN-1999;	99US-0139459P.	PR	20-AUG-1999;	99US-0145929P.
PR	18-JUN-1999;	99US-0139460P.	PR	23-AUG-1999;	99US-0145902P.
PR	18-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-0145930P.
PR	18-JUN-1999;	99US-0139462P.	PR	25-AUG-1999;	99US-0155666P.
PR	18-JUN-1999;	99US-0139463P.	PR	26-AUG-1999;	99US-0155884P.
PR	18-JUN-1999;	99US-0139464P.	PR	27-AUG-1999;	99US-0155065P.
PR	18-JUN-1999;	99US-0139750P.	PR	27-AUG-1999;	99US-0155066P.
PR	18-JUN-1999;	99US-0139763P.	PR	27-AUG-1999;	99US-0155080P.
PR	21-JUN-1999;	99US-0139817P.	PR	30-AUG-1999;	99US-0155303P.
PR	22-JUN-1999;	99US-0139839P.	PR	31-AUG-1999;	99US-0155438P.
PR	23-JUN-1999;	99US-0140533P.	PR	01-SEP-1999;	99US-0155930P.
PR	24-JUN-1999;	99US-014054P.	PR	07-SEP-1999;	99US-01552363P.
PR	24-JUN-1999;	99US-0140595P.	PR	10-SEP-1999;	99US-0155070P.
PR	28-JUN-1999;	99US-0140823P.	PR	13-SEP-1999;	99US-0155758P.
PR	29-JUN-1999;	99US-0140911P.	PR	15-SEP-1999;	99US-0155018P.
PR	30-JUN-1999;	99US-0141287P.	PR	16-SEP-1999;	99US-0155039P.
PR	01-JUL-1999;	99US-0141842P.	PR	20-SEP-1999;	99US-0155779P.
PR	01-JUL-1999;	99US-0142154P.	PR	22-SEP-1999;	99US-0155139P.
PR	02-JUL-1999;	99US-0142055P.	PR	23-SEP-1999;	99US-0155486P.
PR	06-JUL-1999;	99US-0142390P.	PR	24-SEP-1999;	99US-0155659P.
PR	08-JUL-1999;	99US-0142803P.	PR	28-SEP-1999;	99US-0155458P.
PR	09-JUL-1999;	99US-0142930P.	PR	29-SEP-1999;	99US-0155596P.
PR	12-JUL-1999;	99US-0142977P.	PR	12-OCT-1999;	99US-0155316P.
PR	13-JUL-1999;	99US-0143542P.	PR	14-OCT-1999;	99US-0155637P.
PR	14-JUL-1999;	99US-0143624P.	PR	15-OCT-1999;	99US-015753P.
PR	15-JUL-1999;	99US-0144005P.	PR	06-OCT-1999;	99US-0155295P.
PR	16-JUL-1999;	99US-0144085P.	PR	07-OCT-1999;	99US-0155329P.
PR	16-JUL-1999;	99US-0144086P.	PR	08-OCT-1999;	99US-0155330P.
PR	19-JUL-1999;	99US-0144334P.	PR	14-OCT-1999;	99US-016767P.
PR	19-JUL-1999;	99US-0144335P.	PR	21-OCT-1999;	99US-016768P.
PR	20-JUL-1999;	99US-0144322P.	PR	21-OCT-1999;	99US-015637P.
PR	20-JUL-1999;	99US-0144632P.	PR	14-OCT-1999;	99US-01670P.
PR	21-JUL-1999;	99US-0144844P.	PR	21-OCT-1999;	99US-016814P.
PR	21-JUL-1999;	99US-0144331P.	PR	18-OCT-1999;	99US-015584P.
PR	21-JUL-1999;	99US-0144814P.	PR	21-OCT-1999;	99US-016741P.
PR	21-JUL-1999;	99US-0145089P.	PR	22-OCT-1999;	99US-016980P.
PR	23-JUL-1999;	99US-0145088P.	PR	22-OCT-1999;	99US-016981P.
PR	23-JUL-1999;	99US-0145218P.	PR	22-OCT-1999;	99US-016989P.
PR	23-JUL-1999;	99US-0145224P.	PR	25-OCT-1999;	99US-0161404P.
PR	26-JUL-1999;	99US-0145276P.	PR	25-OCT-1999;	99US-0161405P.
PR	27-JUL-1999;	99US-0145913P.	PR	25-OCT-1999;	99US-0161406P.
PR	27-JUL-1999;	99US-0145918P.			

PR 26-OCT-1999; 99US-0161359P.  
 PR 26-OCT-1999; 99US-0161160P.  
 PR 26-OCT-1999; 99US-0161161P.  
 PR 28-OCT-1999; 99US-0161120P.  
 PR 28-OCT-1999; 99US-01611992P.  
 PR 28-OCT-1999; 99US-01611993P.  
 PR 29-OCT-1999; 99US-01621142P.  
 PR Alignment Scores:  
 Pred. No.: 7.48 Length: 220  
 Score: 45.00 Matches: 7  
 Percent Similarity: 100.0% Conservative: 1  
 Best Local Similarity: 87.5% Mismatches: 0  
 Query Match: 84.9% Indels: 0  
 DB: 3 Gaps: 0  
 US-10-717-243-59 (1-28) × AAG59642 (1-220)  
 Qy 25 AAAATGAAGTCTGGTTACATGT 2  
 | :|||:|||:|||:|||:|||:  
 Db 81 LysMethylAcCysPheThrCys 88  
 AC AAG60333 standard; protein; 257 AA.  
 XX SEQ ID NO: 78136.  
 AC AAG60333;  
 XX DT 18-OCT-2000 (First entry)  
 XX DE *Arabidopsis thaliana* protein fragment SEQ ID NO: 78136.  
 XX KW Protein identification; signal transduction pathway; metabolic pathway;  
 KW hybridisation assay; genetic mapping; gene expression control; promoter;  
 KW termination sequence.  
 OS *Arabidopsis thaliana*.  
 PN EP1033405-A2.  
 XX PP 06-SEP-2000.  
 XX PP 25-FEB-2000; 2000EP-00301439.  
 XX PR 25-FEB-1999; 99US-0121825P.  
 PR 05-MAR-1999; 99US-0121810P.  
 PR 09-MAR-1999; 99US-0123548P.  
 PR 23-MAR-1999; 99US-0125788P.  
 PR 25-MAR-1999; 99US-012656P.  
 PR 29-MAR-1999; 99US-0126785P.  
 PR 01-APR-1999; 99US-0124462P.  
 PR 06-APR-1999; 99US-012833P.  
 PR 08-APR-1999; 99US-0128714P.  
 PR 30-APR-1999; 99US-0128848P.  
 PR 30-APR-1999; 99US-0130077P.  
 PR 04-MAY-1999; 99US-0130449P.  
 PR 23-APR-1999; 99US-0130510P.  
 PR 05-MAY-1999; 99US-0132485P.  
 PR 23-APR-1999; 99US-0130891P.  
 PR 08-APR-1999; 99US-0131449P.  
 PR 30-APR-1999; 99US-0132848P.  
 PR 30-APR-1999; 99US-0132407P.  
 PR 04-MAY-1999; 99US-0132484P.  
 PR 14-MAY-1999; 99US-0132419P.  
 PR 06-MAY-1999; 99US-0132486P.  
 PR 07-MAY-1999; 99US-0132487P.  
 PR 11-MAY-1999; 99US-013256P.  
 PR 14-MAY-1999; 99US-013218P.  
 PR 14-MAY-1999; 99US-013219P.  
 PR 14-MAY-1999; 99US-013221P.  
 PR 18-MAY-1999; 99US-013470P.  
 PR 18-MAY-1999; 99US-0134768P.  
 PR 19-MAY-1999; 99US-0134941P.  
 PR 20-MAY-1999; 99US-0135124P.  
 PR 21-MAY-1999; 99US-0115353P.  
 PR 24-MAY-1999; 99US-0115629P.  
 PR 25-MAY-1999; 99US-0116021P.  
 PR 27-MAY-1999; 99US-01136392P.  
 PR 28-MAY-1999; 99US-0116782P.  
 PR 01-JUN-1999; 99US-0117222P.  
 PR 03-JUN-1999; 99US-0137528P.  
 PR 04-JUN-1999; 99US-0137502P.  
 PR 07-JUN-1999; 99US-0137724P.  
 PR 08-JUN-1999; 99US-0138094P.  
 PR 10-JUN-1999; 99US-0138540P.  
 PR 10-JUN-1999; 99US-0138847P.  
 PR 14-JUN-1999; 99US-0139119P.  
 PR 16-JUN-1999; 99US-0139452P.  
 PR 17-JUN-1999; 99US-0139453P.  
 PR 18-JUN-1999; 99US-0139454P.  
 PR 18-JUN-1999; 99US-0139455P.  
 PR 18-JUN-1999; 99US-0139456P.  
 PR 18-JUN-1999; 99US-0139457P.  
 PR 18-JUN-1999; 99US-0139458P.  
 PR 18-JUN-1999; 99US-0139459P.  
 PR 18-JUN-1999; 99US-0139460P.  
 PR 18-JUN-1999; 99US-0139461P.  
 PR 18-JUN-1999; 99US-0139462P.  
 PR 18-JUN-1999; 99US-0139463P.  
 PR 18-JUN-1999; 99US-0139750P.  
 PR 18-JUN-1999; 99US-0139763P.  
 PR 21-JUN-1999; 99US-0139817P.  
 PR 22-JUN-1999; 99US-0139899P.  
 PR 23-JUN-1999; 99US-0140353P.  
 PR 23-JUN-1999; 99US-0140354P.  
 PR 24-JUN-1999; 99US-0140695P.  
 PR 28-JUN-1999; 99US-0140823P.  
 PR 29-JUN-1999; 99US-0140991P.  
 PR 30-JUN-1999; 99US-0141287P.  
 PR 01-JUL-1999; 99US-0141842P.  
 PR 01-JUL-1999; 99US-0142154P.  
 PR 02-JUL-1999; 99US-0142055P.  
 PR 06-JUL-1999; 99US-0142390P.  
 PR 08-JUL-1999; 99US-0142803P.  
 PR 09-JUL-1999; 99US-0142920P.  
 PR 12-JUL-1999; 99US-0142977P.  
 PR 13-JUL-1999; 99US-0143542P.  
 PR 14-JUL-1999; 99US-0143624P.  
 PR 15-JUL-1999; 99US-0144005P.  
 PR 16-JUL-1999; 99US-0144085P.  
 PR 16-JUL-1999; 99US-0144086P.  
 PR 19-JUL-1999; 99US-0144325P.  
 PR 19-JUL-1999; 99US-0144331P.  
 PR 20-JUL-1999; 99US-0144632P.  
 PR 22-JUL-1999; 99US-0144632P.  
 PR 22-JUL-1999; 99US-0144844P.  
 PR 22-JUL-1999; 99US-0144814P.  
 PR 23-JUL-1999; 99US-0145145P.  
 PR 23-JUL-1999; 99US-0145086P.  
 PR 23-JUL-1999; 99US-0145088P.  
 PR 23-JUL-1999; 99US-014535P.  
 PR 26-JUL-1999; 99US-0145085P.  
 PR 26-JUL-1999; 99US-0145244P.  
 PR 27-JUL-1999; 99US-0145913P.  
 PR 27-JUL-1999; 99US-0145918P.  
 PR 27-JUL-1999; 99US-0145919P.  
 PR 28-JUL-1999; 99US-0145951P.

PR 02-AUG-1999; 99US-0146388P. PR 02-AUG-1999; 99US-0146388P. PR 02-AUG-1999; 99US-0146388P. PR 03-AUG-1999; 99US-0147204P. PR 04-AUG-1999; 99US-0147302P. PR 05-AUG-1999; 99US-0147192P. PR 06-AUG-1999; 99US-0147303P. PR 06-AUG-1999; 99US-0147416P. PR 09-AUG-1999; 99US-0147935P. PR 10-AUG-1999; 99US-0148171P. PR 11-AUG-1999; 99US-0147260P. PR 12-AUG-1999; 99US-0147303P. PR 13-AUG-1999; 99US-0148684P. PR 16-AUG-1999; 99US-0149368P. PR 17-AUG-1999; 99US-014915P. PR 18-AUG-1999; 99US-0149436P. PR 20-AUG-1999; 99US-0148319P. PR 20-AUG-1999; 99US-0149722P. PR 20-AUG-1999; 99US-0149723P. PR 23-AUG-1999; 99US-0149939P. PR 23-AUG-1999; 99US-0149902P. PR 25-AUG-1999; 99US-0149930P. PR 26-AUG-1999; 99US-0150566P. PR 27-AUG-1999; 99US-0151065P. PR 27-AUG-1999; 99US-0151066P. PR 27-AUG-1999; 99US-0151080P. PR 30-AUG-1999; 99US-0151303P. PR 31-AUG-1999; 99US-0151304P. PR 01-SEP-1999; 99US-0151920P. PR 07-SEP-1999; 99US-0152333P. PR 10-SEP-1999; 99US-0153070P. PR 13-SEP-1999; 99US-0153758P. PR 15-SEP-1999; 99US-0154018P. PR 16-SEP-1999; 99US-0154039P. PR 20-SEP-1999; 99US-0154779P. PR 22-SEP-1999; 99US-0155139P. PR 23-SEP-1999; 99US-0155488P. PR 24-SEP-1999; 99US-0155639P. PR 28-SEP-1999; 99US-0156458P. PR 29-SEP-1999; 99US-0156596P. PR 04-OCT-1999; 99US-0157117P. PR 05-OCT-1999; 99US-0157753P. PR 06-OCT-1999; 99US-0157855P. PR 07-OCT-1999; 99US-0158029P. PR 08-OCT-1999; 99US-0158232P. PR 12-OCT-1999; 99US-0158366P. PR 13-OCT-1999; 99US-0159233P. PR 13-OCT-1999; 99US-0159244P. PR 13-OCT-1999; 99US-0159255P. PR 14-OCT-1999; 99US-0159329P. PR 14-OCT-1999; 99US-0159310P. PR 14-OCT-1999; 99US-0159311P. PR 14-OCT-1999; 99US-0159637P. PR 14-OCT-1999; 99US-0159638P. PR 18-OCT-1999; 99US-0159584P. PR 21-OCT-1999; 99US-0160741P. PR 21-OCT-1999; 99US-0160767P. PR 22-OCT-1999; 99US-0160981P. PR 22-OCT-1999; 99US-0160989P. PR 25-OCT-1999; 99US-0161405P. PR 25-OCT-1999; 99US-0161406P. PR 26-OCT-1999; 99US-0161359P. PR 26-OCT-1999; 99US-0161360P.

PR 26-OCT-1999; 99US-0161361P. PR 28-OCT-1999; 99US-0161920P. PR 28-OCT-1999; 99US-0161922P. PR 28-OCT-1999; 99US-0161933P. PR 29-OCT-1999; 99US-0162142P.

Alignment Scores:  
Pred. No.: 7.51  
Score: 45.00  
Percent Similarity: 100.0%  
Best Local Similarity: 87.5%  
Query Match: 84.9%  
DB: 3  
Gaps: 0

Length: 257  
Matches: 7  
Conservative: 1  
Mismatched: 0  
Indels: 0

US-10-717-243-59 (1-28) x AAG60333 (1-257)

Qy 25 AAAATGAAGTCCTGGTTTACATGT 2  
Db 148 LysMethylSarAcySPheThrCys 155

RESULT 7  
AAG60326  
ID AAG60326 standard; protein; 263 AA.  
XX  
AC AAG60326;  
XX DT 18-OCT-2000 (first entry)  
XX DB Arabidopsis thaliana protein fragment SBQ ID NO: 78127.  
XX KW Protein identification; signal transduction pathway; metabolic pathway;  
KW hybridisation assay; genetic mapping; gene expression control; promoter;  
KW termination sequence.  
XX OS Arabidopsis thaliana.  
XX PN EP1033405-A2.  
XX PD 06-SEP-2000.  
XX XX 25-FEB-2000; 2000EP-00301439.  
XX PR 25-FEB-1999; 99US-0121825P.  
PR 05-MAR-1999; 99US-0123180P.  
PR 09-MAR-1999; 99US-012548P.  
PR 23-MAR-1999; 99US-0125788P.  
PR 25-MAR-1999; 99US-0126264P.  
PR 29-MAR-1999; 99US-0126785P.  
PR 01-APR-1999; 99US-0127462P.  
PR 06-APR-1999; 99US-0128224P.  
PR 08-APR-1999; 99US-0128714P.  
PR 16-APR-1999; 99US-0128845P.  
PR 19-APR-1999; 99US-0130077P.  
PR 21-APR-1999; 99US-0130449P.  
PR 23-APR-1999; 99US-0130510P.  
PR 23-APR-1999; 99US-0130811P.  
PR 06-MAY-1999; 99US-0131449P.  
PR 08-APR-1999; 99US-0132487P.  
PR 30-APR-1999; 99US-0132463P.  
PR 30-APR-1999; 99US-013456P.  
PR 11-MAY-1999; 99US-0134418P.  
PR 14-MAY-1999; 99US-0134219P.  
PR 14-MAY-1999; 99US-0134221P.  
PR 14-MAY-1999; 99US-0134310P.  
PR 18-MAY-1999; 99US-0134168P.  
PR 19-MAY-1999; 99US-0134941P.  
PR 20-MAY-1999; 99US-0135124P.  
PR 21-MAY-1999; 99US-0135153P.

PR	24-MAY-1999;	99US-0135629P.	PR	02-AUG-1999;	99US-0146389P.
PR	25-MAY-1999;	99US-0136021P.	PR	03-AUG-1999;	99US-0147038P.
PR	27-MAY-1999;	99US-0136312P.	PR	04-AUG-1999;	99US-0147204P.
PR	28-MAY-1999;	99US-0136782P.	PR	04-AUG-1999;	99US-0147302P.
PR	01-JUN-1999;	99US-0137222P.	PR	05-AUG-1999;	99US-0147192P.
PR	03-JUN-1999;	99US-0137513P.	PR	05-AUG-1999;	99US-0147260P.
PR	04-JUN-1999;	99US-0137602P.	PR	06-AUG-1999;	99US-0147303P.
PR	07-JUN-1999;	99US-0137724P.	PR	06-AUG-1999;	99US-0147416P.
PR	08-JUN-1999;	99US-0138094P.	PR	07-AUG-1999;	99US-0147493P.
PR	10-JUN-1999;	99US-0138510P.	PR	09-AUG-1999;	99US-0147935P.
PR	10-JUN-1999;	99US-0138847P.	PR	10-AUG-1999;	99US-0148171P.
PR	14-JUN-1999;	99US-0139119P.	PR	11-AUG-1999;	99US-0148319P.
PR	16-JUN-1999;	99US-0139452P.	PR	12-AUG-1999;	99US-0148341P.
PR	16-JUN-1999;	99US-0139453P.	PR	13-AUG-1999;	99US-0148565P.
PR	17-JUN-1999;	99US-0139459P.	PR	13-AUG-1999;	99US-0148684P.
PR	18-JUN-1999;	99US-0139461P.	PR	16-AUG-1999;	99US-0149368P.
PR	18-JUN-1999;	99US-0139465P.	PR	17-AUG-1999;	99US-0149175P.
PR	18-JUN-1999;	99US-0139466P.	PR	18-AUG-1999;	99US-0149426P.
PR	18-JUN-1999;	99US-0139467P.	PR	20-AUG-1999;	99US-0149722P.
PR	18-JUN-1999;	99US-0139468P.	PR	20-AUG-1999;	99US-0149723P.
PR	18-JUN-1999;	99US-0139469P.	PR	20-AUG-1999;	99US-0149829P.
PR	18-JUN-1999;	99US-0139469P.	PR	23-AUG-1999;	99US-0149902P.
PR	18-JUN-1999;	99US-0139469P.	PR	23-AUG-1999;	99US-0149930P.
PR	22-JUN-1999;	99US-0139899P.	PR	25-AUG-1999;	99US-0150566P.
PR	23-JUN-1999;	99US-0140315P.	PR	26-AUG-1999;	99US-0150654P.
PR	23-JUN-1999;	99US-0140354P.	PR	27-AUG-1999;	99US-0150655P.
PR	24-JUN-1999;	99US-0140695P.	PR	27-AUG-1999;	99US-0150666P.
PR	28-JUN-1999;	99US-0140823P.	PR	27-AUG-1999;	99US-0150800P.
PR	29-JUN-1999;	99US-0140917P.	PR	27-AUG-1999;	99US-0150930P.
PR	30-JUN-1999;	99US-0140991P.	PR	31-AUG-1999;	99US-0151438P.
PR	01-JUL-1999;	99US-0141287P.	PR	01-SEP-1999;	99US-0151930P.
PR	01-JUL-1999;	99US-0141842P.	PR	07-SEP-1999;	99US-0152363P.
PR	02-JUL-1999;	99US-0142154P.	PR	10-SEP-1999;	99US-0153070P.
PR	06-JUL-1999;	99US-0142055P.	PR	13-SEP-1999;	99US-0154758P.
PR	08-JUL-1999;	99US-0142803P.	PR	15-SEP-1999;	99US-0154018P.
PR	12-JUL-1999;	99US-0142920P.	PR	29-SEP-1999;	99US-0154039P.
PR	13-JUL-1999;	99US-0143977P.	PR	04-OCT-1999;	99US-0157117P.
PR	14-JUL-1999;	99US-0143542P.	PR	05-OCT-1999;	99US-0157753P.
PR	15-JUL-1999;	99US-0143624P.	PR	23-SEP-1999;	99US-0155486P.
PR	16-JUL-1999;	99US-0144005P.	PR	24-SEP-1999;	99US-0156159P.
PR	16-JUL-1999;	99US-0144086P.	PR	28-SEP-1999;	99US-0156596P.
PR	19-JUL-1999;	99US-0144325P.	PR	04-OCT-1999;	99US-0157117P.
PR	19-JUL-1999;	99US-0144331P.	PR	13-OCT-1999;	99US-0159293P.
PR	20-JUL-1999;	99US-0144332P.	PR	13-OCT-1999;	99US-015294P.
PR	19-JUL-1999;	99US-0144333P.	PR	13-OCT-1999;	99US-015295P.
PR	21-JUL-1999;	99US-0144334P.	PR	14-OCT-1999;	99US-015322P.
PR	21-JUL-1999;	99US-0144335P.	PR	08-OCT-1999;	99US-015330P.
PR	22-JUL-1999;	99US-0144335P.	PR	14-OCT-1999;	99US-0159331P.
PR	22-JUL-1999;	99US-0144587P.	PR	21-OCT-1999;	99US-0160768P.
PR	22-JUL-1999;	99US-0144589P.	PR	25-OCT-1999;	99US-0161404P.
PR	22-JUL-1999;	99US-0144514P.	PR	21-OCT-1999;	99US-0161406P.
PR	23-JUL-1999;	99US-0145145P.	PR	22-OCT-1999;	99US-0166980P.
PR	23-JUL-1999;	99US-0145088P.	PR	22-OCT-1999;	99US-0166981P.
PR	26-JUL-1999;	99US-0145224P.	PR	22-OCT-1999;	99US-0166989P.
PR	26-JUL-1999;	99US-0145276P.	PR	25-OCT-1999;	99US-016770P.
PR	27-JUL-1999;	99US-0145133P.	PR	25-OCT-1999;	99US-016814P.
PR	27-JUL-1999;	99US-0145918P.	PR	25-OCT-1999;	99US-0161359P.
PR	27-JUL-1999;	99US-0145919P.	PR	26-OCT-1999;	99US-0161360P.
PR	02-AUG-1999;	99US-0146386P.	PR	26-OCT-1999;	99US-0161361P.
PR	02-AUG-1999;	99US-0146388P.	PR	28-OCT-1999;	99US-0161920P.

PR 28-OCT-1999; 99US-0161932P.  
 PR 28-OCT-1999; 99US-0161933P.  
 PR 29-OCT-1999; 99US-0162142P.

**Alignment Scores:**

Pred. No. :	7.51	Length:	263
Score:	45.00	Matches:	7
Percent Similarity:	100.0%	Conservative:	1
Best Local Similarity:	87.5%	Mismatches:	0
Query Match:	84.9%	Indels:	0
DB:	3	Gaps:	0

US-10-717-243-59 (1-28) x AAG60326 (1-263)

Qy 25 AAAATGAAAGTCCTGTCTTACATGT 2  
 Db 148 lysMethylAlaCysPhethrcys 155

---

**RESULT 8**  
**ID AAG04861** standard; Protein: 286 AA.

XX AAG04861;  
 AC AAG04861;

DT 17-OCT-2000 (first entry)  
 XX DB Arabidopsis thaliana protein fragment SEQ ID NO: 1048.  
 XX Protein identification; signal transduction pathway; metabolic pathway;  
 KW hybridisation assay; genetic mapping; gene expression control; promoter;  
 KW termination sequence.  
 XX OS Arabidopsis thaliana.  
 XX PN EP1033405-A2.  
 XX PD 06-SEP-2000.  
 XX PF 25-FEB-2000; 2000EP-00301439.  
 XX 25-FEB-1999; 39US-0121828P.  
 PR 05-MAR-1999; 99US-0123180P.  
 PR 09-MAR-1999; 99US-0123548P.  
 PR 23-MAR-1999; 99US-0125788P.  
 PR 25-MAR-1999; 99US-0126244P.  
 PR 29-MAR-1999; 99US-0126705P.  
 PR 01-APR-1999; 99US-0127462P.  
 PR 06-APR-1999; 99US-0128244P.  
 PR 08-APR-1999; 99US-0128714P.  
 PR 16-APR-1999; 99US-0129845P.  
 PR 19-APR-1999; 99US-0130077P.  
 PR 21-APR-1999; 99US-0130449P.  
 PR 23-APR-1999; 99US-0130510P.  
 PR 28-APR-1999; 99US-0131449P.  
 PR 30-APR-1999; 99US-0132048P.  
 PR 04-MAY-1999; 99US-0132484P.  
 PR 05-MAY-1999; 99US-0132485P.  
 PR 06-MAY-1999; 99US-0132491P.  
 PR 06-MAY-1999; 99US-0132496P.  
 PR 07-MAY-1999; 99US-0132487P.  
 PR 11-MAY-1999; 99US-0132863P.  
 PR 14-MAY-1999; 99US-0134218P.  
 PR 14-MAY-1999; 99US-0134219P.  
 PR 14-MAY-1999; 99US-0134221P.  
 PR 14-MAY-1999; 99US-0134370P.  
 PR 18-MAY-1999; 99US-0134766P.  
 PR 19-MAY-1999; 99US-0134941P.  
 PR 20-MAY-1999; 99US-0135124P.  
 PR 21-MAY-1999; 99US-0135354P.  
 PR 24-MAY-1999; 99US-0135629P.  
 PR 25-MAY-1999; 99US-0136021P.

PR 27-MAY-1999; 99US-0136392P.  
 PR 28-MAY-1999; 99US-0136782P.  
 PR 01-JUN-1999; 99US-0137222P.  
 PR 03-JUN-1999; 99US-0137528P.  
 PR 04-JUN-1999; 99US-0137502P.  
 PR 07-JUN-1999; 99US-0137724P.  
 PR 08-JUN-1999; 99US-0138094P.  
 PR 10-JUN-1999; 99US-0138540P.  
 PR 10-JUN-1999; 99US-0138847P.  
 PR 14-JUN-1999; 99US-0139119P.  
 PR 16-JUN-1999; 99US-0139452P.  
 PR 16-JUN-1999; 99US-0139453P.  
 PR 17-JUN-1999; 99US-0139492P.  
 PR 18-JUN-1999; 99US-0139454P.  
 PR 18-JUN-1999; 99US-0139455P.  
 PR 18-JUN-1999; 99US-0139456P.  
 PR 18-JUN-1999; 99US-0139457P.  
 PR 18-JUN-1999; 99US-0139458P.  
 PR 18-JUN-1999; 99US-0139459P.  
 PR 18-JUN-1999; 99US-0139460P.  
 PR 18-JUN-1999; 99US-0139461P.  
 PR 18-JUN-1999; 99US-0139462P.  
 PR 18-JUN-1999; 99US-0139463P.  
 PR 18-JUN-1999; 99US-0139750P.  
 PR 18-JUN-1999; 99US-0139763P.  
 PR 21-JUN-1999; 99US-0139817P.  
 PR 22-JUN-1999; 99US-0139899P.  
 PR 23-JUN-1999; 99US-0140353P.  
 PR 23-JUN-1999; 99US-0140354P.  
 PR 24-JUN-1999; 99US-0140695P.  
 PR 28-JUN-1999; 99US-0140823P.  
 PR 29-JUN-1999; 99US-0140991P.  
 PR 30-JUN-1999; 99US-0142877P.  
 PR 01-JUL-1999; 99US-0141842P.  
 PR 01-JUL-1999; 99US-0141545P.  
 PR 02-JUL-1999; 99US-0142055P.  
 PR 06-JUL-1999; 99US-0142390P.  
 PR 08-JUL-1999; 99US-0142803P.  
 PR 09-JUL-1999; 99US-0142920P.  
 PR 12-JUL-1999; 99US-0142977P.  
 PR 13-JUL-1999; 99US-0142542P.  
 PR 14-JUL-1999; 99US-0141624P.  
 PR 15-JUL-1999; 99US-0144005P.  
 PR 16-JUL-1999; 99US-014085P.  
 PR 16-JUL-1999; 99US-014086P.  
 PR 19-JUL-1999; 99US-014325P.  
 PR 19-JUL-1999; 99US-014331P.  
 PR 20-JUL-1999; 99US-014332P.  
 PR 21-JUL-1999; 99US-014333P.  
 PR 19-JUL-1999; 99US-014334P.  
 PR 19-JUL-1999; 99US-014335P.  
 PR 20-JUL-1999; 99US-014352P.  
 PR 22-JUL-1999; 99US-014362P.  
 PR 22-JUL-1999; 99US-0143684P.  
 PR 22-JUL-1999; 99US-014392P.  
 PR 27-JUL-1999; 99US-014513P.  
 PR 23-JUL-1999; 99US-014518P.  
 PR 21-JUL-1999; 99US-0145145P.  
 PR 23-JUL-1999; 99US-0145218P.  
 PR 23-JUL-1999; 99US-0145224P.  
 PR 26-JUL-1999; 99US-0145276P.  
 PR 27-JUL-1999; 99US-0145313P.  
 PR 27-JUL-1999; 99US-0145318P.  
 PR 27-JUL-1999; 99US-0145319P.  
 PR 28-JUL-1999; 99US-0145386P.  
 PR 02-AUG-1999; 99US-0145388P.  
 PR 02-AUG-1999; 99US-0145389P.  
 PR 03-AUG-1999; 99US-0147038P.

PR	04-AUG-1999;	99US-0147204P.	PR	29-OCT-1999;	99US-0162142P.
PR	05-AUG-1999;	99US-014702P.	Alignment Scores:	7.53	Length: 286
PR	05-AUG-1999;	99US-0147192P.	Pred. No.:	45.00	Matches: 7
PR	05-AUG-1999;	99US-0147260P.	Score:	100.0%	Conservative: 1
PR	06-AUG-1999;	99US-0147263P.	Percent Similarity:	87.5%	Mismatches: 0
PR	06-AUG-1999;	99US-0147303P.	Best Local Similarity:	84.9%	Indels: 0
PR	09-AUG-1999;	99US-0147416P.	Query Match:	3	Gaps: 0
PR	09-AUG-1999;	99US-0147493P.	DB:		
PR	10-AUG-1999;	99US-014735P.			
PR	11-AUG-1999;	99US-014817P.			
PR	12-AUG-1999;	99US-0148319P.			
PR	13-AUG-1999;	99US-0148341P.			
PR	13-AUG-1999;	99US-014855P.			
PR	16-AUG-1999;	99US-0148634P.			
PR	17-AUG-1999;	99US-014917P.			
PR	18-AUG-1999;	99US-0149319P.			
PR	20-AUG-1999;	99US-0149722P.			
PR	20-AUG-1999;	99US-0149723P.			
PR	23-AUG-1999;	99US-0149939P.			
PR	23-AUG-1999;	99US-0149930P.			
PR	25-AUG-1999;	99US-0149933P.			
PR	26-AUG-1999;	99US-015056P.			
PR	27-AUG-1999;	99US-0150884P.			
PR	27-AUG-1999;	99US-0151065P.			
PR	27-AUG-1999;	99US-0151066P.			
PR	30-AUG-1999;	99US-0151203P.			
PR	31-AUG-1999;	99US-0151438P.			
PR	01-SEP-1999;	99US-0151930P.			
PR	07-SEP-1999;	99US-0152263P.			
PR	10-SEP-1999;	99US-0153070P.			
PR	13-SEP-1999;	99US-0153158P.			
PR	15-SEP-1999;	99US-0154018P.			
PR	16-SEP-1999;	99US-0154039P.			
PR	20-SEP-1999;	99US-0155139P.			
PR	22-SEP-1999;	99US-0155513P.			
PR	23-SEP-1999;	99US-0155486P.			
PR	24-SEP-1999;	99US-0155659P.			
PR	28-SEP-1999;	99US-015659P.			
PR	29-SEP-1999;	99US-0156516P.			
PR	04-OCT-1999;	99US-0157117P.			
PR	05-OCT-1999;	99US-0157753P.			
PR	06-OCT-1999;	99US-0157865P.			
PR	07-OCT-1999;	99US-0158029P.			
PR	08-OCT-1999;	99US-0158232P.			
PR	12-OCT-1999;	99US-0158169P.			
PR	13-OCT-1999;	99US-0159293P.			
PR	13-OCT-1999;	99US-0159294P.			
PR	13-OCT-1999;	99US-0159245P.			
PR	14-OCT-1999;	99US-0159229P.			
PR	14-OCT-1999;	99US-0159310P.			
PR	14-OCT-1999;	99US-0159331P.			
PR	14-OCT-1999;	99US-0159637P.			
PR	14-OCT-1999;	99US-0159638P.			
PR	18-OCT-1999;	99US-0159384P.			
PR	22-OCT-1999;	99US-0160741P.			
PR	21-OCT-1999;	99US-0160767P.			
PR	21-OCT-1999;	99US-0160768P.			
PR	21-OCT-1999;	99US-0160770P.			
PR	21-OCT-1999;	99US-0160814P.			
PR	21-OCT-1999;	99US-0160815P.			
PR	25-OCT-1999;	99US-0161406P.			
PR	26-OCT-1999;	99US-0161359P.			
PR	26-OCT-1999;	99US-0161360P.			
PR	26-OCT-1999;	99US-0161361P.			
PR	28-OCT-1999;	99US-0161920P.			
PR	28-OCT-1999;	99US-0161922P.			
PR	28-OCT-1999;	99US-0161933P.			

Alignment Scores:  
Pred. No.: 7.53  
Score: 45.00  
Percent Similarity: 100.0%  
Best Local Similarity: 87.5%  
Query Match: 84.9%  
Length: 286  
Matches: 7  
Mismatches: 1  
Indels: 0  
Gaps: 0

US-10-717-243-59 (1-28) x AAG04861 (1-286)

Qy 25 AAAATGAAGTCCTGTTACATGT 2  
Db 148 LysMetLysAlaCysPheThrCys 155

RESULT 9  
AAG51641 standard; protein; 287 AA.  
XX ID AAG59641  
XX AC AAG59641;  
XX DT 18-OCT-2000 (first entry)  
XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 77165.  
XX KW Protein identification; signal transduction pathway; metabolic pathway;  
KW hybridisation assay; genetic mapping; gene expression control; promoter;  
KW termination sequence.  
XX OS Arabidopsis thaliana.  
XX PN EP1033405-A2.  
XX PR 25-SEP-2000; 20000EP-00301439.  
XX PD 06-SEP-2000.  
XX PR 25-FEB-2000; 20000EP-00301439.  
XX PR 05-MAR-1999; 99US-0121825P.  
PR 09-MAR-1999; 99US-0123548P.  
PR 23-MAR-1999; 99US-0125788P.  
PR 25-MAR-1999; 99US-0126264P.  
PR 29-MAR-1999; 99US-0126785P.  
PR 01-APR-1999; 99US-0127462P.  
PR 06-APR-1999; 99US-012834P.  
PR 08-APR-1999; 99US-0128714P.  
PR 16-APR-1999; 99US-0129845P.  
PR 19-APR-1999; 99US-0130407P.  
PR 21-APR-1999; 99US-0130449P.  
PR 23-APR-1999; 99US-0130510P.  
PR 23-APR-1999; 99US-0130891P.  
PR 06-MAY-1999; 99US-0131449P.  
PR 28-APR-1999; 99US-0132863P.  
PR 30-APR-1999; 99US-0134204B.  
PR 30-APR-1999; 99US-0134256P.  
PR 04-MAY-1999; 99US-0134218P.  
PR 05-MAY-1999; 99US-0134285P.  
PR 06-MAY-1999; 99US-0134221P.  
PR 14-MAY-1999; 99US-0134370P.  
PR 18-MAY-1999; 99US-0134768P.  
PR 19-MAY-1999; 99US-0134941P.  
PR 20-MAY-1999; 99US-0135124P.  
PR 21-MAY-1999; 99US-013535P.  
PR 14-MAY-1999; 99US-0134219P.  
PR 14-MAY-1999; 99US-0134487P.  
PR 07-MAY-1999; 99US-0132863P.  
PR 11-MAY-1999; 99US-0134256P.  
PR 14-MAY-1999; 99US-0134218P.  
PR 21-MAY-1999; 99US-0134285P.  
PR 24-MAY-1999; 99US-0135629P.  
PR 25-MAY-1999; 99US-0136021P.  
PR 27-MAY-1999; 99US-0136392P.  
PR 28-MAY-1999; 99US-0136782P.

PR	01-JUN-1999;	99US-0137222P.	PR	05-AUG-1999;	99US-0147192P.
PR	03-JUN-1999;	99US-0137528P.	PR	05-AUG-1999;	99US-0147260P.
PR	04-JUN-1999;	99US-0137502P.	PR	06-AUG-1999;	99US-0147303P.
PR	07-JUN-1999;	99US-0137724P.	PR	06-AUG-1999;	99US-0147416P.
PR	08-JUN-1999;	99US-0138094P.	PR	09-AUG-1999;	99US-0147493P.
PR	10-JUN-1999;	99US-0138540P.	PR	09-AUG-1999;	99US-0147935P.
PR	10-JUN-1999;	99US-0138847P.	PR	10-AUG-1999;	99US-0148171P.
PR	14-JUN-1999;	99US-0139119P.	PR	11-AUG-1999;	99US-0148319P.
PR	16-JUN-1999;	99US-0139452P.	PR	12-AUG-1999;	99US-0148341P.
PR	16-JUN-1999;	99US-0139453P.	PR	13-AUG-1999;	99US-0148565P.
PR	17-JUN-1999;	99US-0139452P.	PR	13-AUG-1999;	99US-014884P.
PR	18-JUN-1999;	99US-0139454P.	PR	16-AUG-1999;	99US-0149368P.
PR	18-JUN-1999;	99US-0139455P.	PR	17-AUG-1999;	99US-0149175P.
PR	18-JUN-1999;	99US-0139456P.	PR	18-AUG-1999;	99US-0149426P.
PR	18-JUN-1999;	99US-0139457P.	PR	20-AUG-1999;	99US-0149722P.
PR	18-JUN-1999;	99US-0139458P.	PR	20-AUG-1999;	99US-0149929P.
PR	18-JUN-1999;	99US-0139459P.	PR	20-AUG-1999;	99US-0149902P.
PR	21-JUN-1999;	99US-0139460P.	PR	23-AUG-1999;	99US-0149930P.
PR	22-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-0149566P.
PR	22-JUN-1999;	99US-0139462P.	PR	25-AUG-1999;	99US-0150884P.
PR	22-JUN-1999;	99US-0139463P.	PR	26-AUG-1999;	99US-014722P.
PR	22-JUN-1999;	99US-0139464P.	PR	27-AUG-1999;	99US-0151065P.
PR	28-JUN-1999;	99US-0139750P.	PR	27-AUG-1999;	99US-0151066P.
PR	28-JUN-1999;	99US-0139753P.	PR	27-AUG-1999;	99US-0151080P.
PR	29-JUN-1999;	99US-0139817P.	PR	30-AUG-1999;	99US-0151303P.
PR	30-JUN-1999;	99US-0139839P.	PR	31-AUG-1999;	99US-0151438P.
PR	23-JUN-1999;	99US-0140353P.	PR	01-SEP-1999;	99US-0151930P.
PR	23-JUN-1999;	99US-0140354P.	PR	07-SEP-1999;	99US-0152163P.
PR	24-JUN-1999;	99US-0140655P.	PR	10-SEP-1999;	99US-0153070P.
PR	06-JUL-1999;	99US-0140833P.	PR	13-SEP-1999;	99US-0153758P.
PR	08-JUL-1999;	99US-0140991P.	PR	15-SEP-1999;	99US-0154018P.
PR	09-JUL-1999;	99US-0141287P.	PR	16-SEP-1999;	99US-0154039P.
PR	12-JUL-1999;	99US-0141844P.	PR	20-SEP-1999;	99US-0154179P.
PR	01-JUL-1999;	99US-0142154P.	PR	22-SEP-1999;	99US-0155139P.
PR	02-JUL-1999;	99US-0142055P.	PR	23-SEP-1999;	99US-0155486P.
PR	06-JUL-1999;	99US-0142390P.	PR	24-SEP-1999;	99US-0156559P.
PR	08-JUL-1999;	99US-0142803P.	PR	28-SEP-1999;	99US-0154545P.
PR	09-JUL-1999;	99US-0142920P.	PR	29-SEP-1999;	99US-0156596P.
PR	12-JUL-1999;	99US-0142977P.	PR	04-OCT-1999;	99US-01547117P.
PR	13-JUL-1999;	99US-0143542P.	PR	05-OCT-1999;	99US-0157753P.
PR	14-JUL-1999;	99US-0143624P.	PR	06-OCT-1999;	99US-015865P.
PR	15-JUL-1999;	99US-0144005P.	PR	07-OCT-1999;	99US-0158029P.
PR	16-JUL-1999;	99US-0144083P.	PR	08-OCT-1999;	99US-0158232P.
PR	16-JUL-1999;	99US-0144086P.	PR	12-OCT-1999;	99US-0158331P.
PR	19-JUL-1999;	99US-0144355P.	PR	14-OCT-1999;	99US-0158469P.
PR	19-JUL-1999;	99US-0144331P.	PR	13-OCT-1999;	99US-0158933P.
PR	19-JUL-1999;	99US-0144322P.	PR	14-OCT-1999;	99US-0159294P.
PR	19-JUL-1999;	99US-0144333P.	PR	13-OCT-1999;	99US-0159295P.
PR	19-JUL-1999;	99US-0144334P.	PR	14-OCT-1999;	99US-0159329P.
PR	19-JUL-1999;	99US-0144335P.	PR	14-OCT-1999;	99US-0159330P.
PR	20-JUL-1999;	99US-0144612P.	PR	14-OCT-1999;	99US-0159331P.
PR	20-JUL-1999;	99US-0144622P.	PR	14-OCT-1999;	99US-0159337P.
PR	22-JUL-1999;	99US-0144624P.	PR	21-OCT-1999;	99US-0160814P.
PR	22-JUL-1999;	99US-0144814P.	PR	21-OCT-1999;	99US-0161061P.
PR	21-JUL-1999;	99US-0144331P.	PR	22-OCT-1999;	99US-0160900P.
PR	23-JUL-1999;	99US-0145086P.	PR	21-OCT-1999;	99US-0160981P.
PR	21-JUL-1999;	99US-0145218P.	PR	22-OCT-1999;	99US-0160989P.
PR	23-JUL-1999;	99US-0145224P.	PR	25-OCT-1999;	99US-0161040P.
PR	26-JUL-1999;	99US-0145087P.	PR	25-OCT-1999;	99US-0161405P.
PR	27-JUL-1999;	99US-0145912P.	PR	25-OCT-1999;	99US-0161454P.
PR	27-JUL-1999;	99US-0145914P.	PR	26-OCT-1999;	99US-0161339P.
PR	28-JUL-1999;	99US-0145915P.	PR	26-OCT-1999;	99US-0161160P.
PR	02-AUG-1999;	99US-0146388P.	PR	26-OCT-1999;	99US-0161361P.
PR	02-AUG-1999;	99US-0146389P.	PR	28-OCT-1999;	99US-0161932P.
PR	03-AUG-1999;	99US-0147030P.	PR	28-OCT-1999;	99US-0161933P.
PR	04-AUG-1999;	99US-0147204P.	PR	29-OCT-1999;	99US-0162142P.

Alignment Scores:  
Pred. No.: 7.53 Length: 287  
Score: 45.00 Matches: 7  
Percent Similarity: 100.0% Conservative: 1  
Best Local Similarity: 87.5% Mismatches: 0  
Query Match: 84.9% Indels: 0  
DB: 3 Gaps: 0

US-10-717-243-59 (1-28) × AAG59641 (1-287)  
Qy 25 AAAATGAACTCTGTTACATGT 2  
| :|||:|||:::|||:|||:|||  
Db 148 LysMetLeuAlaCysPheThrCys 155

---

RESULT 10  
AAG60332 standard; protein; 315 AA.  
XX AC AAG60332;  
XX DT 18-OCT-2000 (first entry)  
DE Arabidopsis thaliana protein fragment SEQ ID NO: 78135.  
XX PR 25-FEB-1999; 99US-0121825P.  
PR 09-MAR-1999; 99US-0123180P.  
PR 23-MAR-1999; 99US-0123348P.  
PR 25-MAR-1999; 99US-0125788P.  
PR 29-MAR-1999; 99US-0126264P.  
PR 01-APR-1999; 99US-0126785P.  
PR 06-APR-1999; 99US-0127462P.  
PR 08-APR-1999; 99US-0128334P.  
PR 16-APR-1999; 99US-0128714P.  
PR 19-APR-1999; 99US-0130077P.  
PR 21-APR-1999; 99US-0130449P.  
PR 23-APR-1999; 99US-0130510P.  
PR 28-APR-1999; 99US-0130891P.  
PR 30-APR-1999; 99US-0131449P.  
PR 04-MAY-1999; 99US-0132407P.  
PR 05-MAY-1999; 99US-0132484P.  
PR 14-MAY-1999; 99US-0132486P.  
PR 06-MAY-1999; 99US-0132487P.  
PR 07-MAY-1999; 99US-0132488P.  
PR 14-MAY-1999; 99US-0132456P.  
PR 20-MAY-1999; 99US-01334218P.  
PR 21-MAY-1999; 99US-0133555P.  
PR 14-MAY-1999; 99US-013421P.  
PR 25-MAY-1999; 99US-0134221P.  
PR 18-MAY-1999; 99US-0134487P.  
PR 20-MAY-1999; 99US-0134941P.  
PR 21-MAY-1999; 99US-0135124P.  
PR 25-MAY-1999; 99US-0135629P.  
PR 27-MAY-1999; 99US-0136592P.  
PR 01-JUN-1999; 99US-0136782P.  
PR 03-JUN-1999; 99US-0137528P.

---

XX PR 04-JUN-1999; 99US-0137502P.  
PR 07-JUN-1999; 99US-0137724P.  
PR 08-JUN-1999; 99US-0138094P.  
PR 10-JUN-1999; 99US-0138540P.  
PR 10-JUN-1999; 99US-0138847P.  
PR 14-JUN-1999; 99US-0138119P.  
PR 16-JUN-1999; 99US-0138452P.  
PR 16-JUN-1999; 99US-0138453P.  
PR 17-JUN-1999; 99US-0138459P.  
PR 18-JUN-1999; 99US-0138460P.  
PR 18-JUN-1999; 99US-0138461P.  
PR 18-JUN-1999; 99US-0138462P.  
PR 18-JUN-1999; 99US-0138463P.  
PR 18-JUN-1999; 99US-0138750P.  
PR 18-JUN-1999; 99US-0139763P.  
PR 21-JUN-1999; 99US-0138817P.  
PR 22-JUN-1999; 99US-0138899P.  
PR 23-JUN-1999; 99US-014053P.  
PR 23-JUN-1999; 99US-0140695P.  
PR 24-JUN-1999; 99US-0140695P.  
PR 28-JUN-1999; 99US-0140823P.  
PR 29-JUN-1999; 99US-0140991P.  
PR 30-JUN-1999; 99US-0141287P.  
PR 01-JUL-1999; 99US-0141342P.  
PR 01-JUL-1999; 99US-014154P.  
PR 02-JUL-1999; 99US-014055P.  
PR 06-JUL-1999; 99US-0141390P.  
PR 08-JUL-1999; 99US-0142803P.  
PR 09-JUL-1999; 99US-0142920P.  
PR 12-JUL-1999; 99US-0142977P.  
PR 13-JUL-1999; 99US-0143542P.  
PR 14-JUL-1999; 99US-0143624P.  
PR 15-JUL-1999; 99US-0144005P.  
PR 16-JUL-1999; 99US-0144085P.  
PR 16-JUL-1999; 99US-0144086P.  
PR 19-JUL-1999; 99US-0144325P.  
PR 19-JUL-1999; 99US-0144331P.  
PR 19-JUL-1999; 99US-0144332P.  
PR 19-JUL-1999; 99US-0144333P.  
PR 19-JUL-1999; 99US-0144334P.  
PR 19-JUL-1999; 99US-0144335P.  
PR 20-JUL-1999; 99US-0144352P.  
PR 20-JUL-1999; 99US-0144632P.  
PR 20-JUL-1999; 99US-0144884P.  
PR 21-JUL-1999; 99US-0144814P.  
PR 21-JUL-1999; 99US-0144866P.  
PR 21-JUL-1999; 99US-0145088P.  
PR 22-JUL-1999; 99US-0144352P.  
PR 22-JUL-1999; 99US-0145087P.  
PR 22-JUL-1999; 99US-0145089P.  
PR 22-JUL-1999; 99US-0145192P.  
PR 23-JUL-1999; 99US-0144145P.  
PR 23-JUL-1999; 99US-0144919P.  
PR 02-AUG-1999; 99US-0144951P.  
PR 02-AUG-1999; 99US-0144386P.  
PR 02-AUG-1999; 99US-0144388P.  
PR 02-AUG-1999; 99US-0144389P.  
PR 03-AUG-1999; 99US-0144038P.  
PR 04-AUG-1999; 99US-0144704P.  
PR 04-AUG-1999; 99US-0144702P.  
PR 05-AUG-1999; 99US-01447192P.  
PR 05-AUG-1999; 99US-01447260P.



PR	08-JUN-1999;	99US-0138094P.	PR	09-AUG-1999;	99US-0147493P.
PR	10-JUN-1999;	99US-0138540P.	PR	09-AUG-1999;	99US-0147935P.
PR	12-JUN-1999;	99US-0138847P.	PR	10-AUG-1999;	99US-0147171P.
PR	14-JUN-1999;	99US-01389119P.	PR	11-AUG-1999;	99US-0148319P.
PR	16-JUN-1999;	99US-0139452P.	PR	12-AUG-1999;	99US-0148341P.
PR	18-JUN-1999;	99US-0139443P.	PR	13-AUG-1999;	99US-0148565P.
PR	17-JUN-1999;	99US-0139492P.	PR	13-AUG-1999;	99US-0148684P.
PR	18-JUN-1999;	99US-0139454P.	PR	16-AUG-1999;	99US-0148368P.
PR	18-JUN-1999;	99US-0139455P.	PR	17-AUG-1999;	99US-0148175P.
PR	18-JUN-1999;	99US-0139456P.	PR	18-AUG-1999;	99US-0148426P.
PR	18-JUN-1999;	99US-0139457P.	PR	20-AUG-1999;	99US-0148722P.
PR	18-JUN-1999;	99US-0139458P.	PR	20-AUG-1999;	99US-0148723P.
PR	18-JUN-1999;	99US-0139459P.	PR	20-AUG-1999;	99US-0148929P.
PR	18-JUN-1999;	99US-0139460P.	PR	23-AUG-1999;	99US-0148902P.
PR	18-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-0148930P.
PR	18-JUN-1999;	99US-0139462P.	PR	25-AUG-1999;	99US-0150566P.
PR	18-JUN-1999;	99US-0139463P.	PR	26-AUG-1999;	99US-0150884P.
PR	18-JUN-1999;	99US-0139464P.	PR	27-AUG-1999;	99US-0151065P.
PR	18-JUN-1999;	99US-0139750P.	PR	27-AUG-1999;	99US-0151066P.
PR	18-JUN-1999;	99US-0139763P.	PR	27-AUG-1999;	99US-0151080P.
PR	21-JUN-1999;	99US-0139817P.	PR	27-AUG-1999;	99US-0151303P.
PR	22-JUN-1999;	99US-0139899P.	PR	31-AUG-1999;	99US-0151438P.
PR	23-JUN-1999;	99US-0140532P.	PR	01-SEP-1999;	99US-0151930P.
PR	23-JUN-1999;	99US-0140544P.	PR	07-SEP-1999;	99US-0151363P.
PR	24-JUL-1999;	99US-0140615P.	PR	10-SEP-1999;	99US-0152070P.
PR	28-JUN-1999;	99US-0140823P.	PR	13-SEP-1999;	99US-0152758P.
PR	29-JUN-1999;	99US-0140917P.	PR	15-SEP-1999;	99US-0153018P.
PR	30-JUN-1999;	99US-0141287P.	PR	16-SEP-1999;	99US-0154039P.
PR	01-JUL-1999;	99US-0141442P.	PR	20-SEP-1999;	99US-0154779P.
PR	01-JUL-1999;	99US-0142154P.	PR	22-SEP-1999;	99US-015139P.
PR	02-JUL-1999;	99US-0142958P.	PR	23-SEP-1999;	99US-0152486P.
PR	06-JUL-1999;	99US-0142390P.	PR	24-SEP-1999;	99US-015659P.
PR	08-JUL-1999;	99US-0142803P.	PR	28-SEP-1999;	99US-015458P.
PR	09-JUL-1999;	99US-0142320P.	PR	29-SEP-1999;	99US-015596P.
PR	12-JUL-1999;	99US-0141842P.	PR	04-OCT-1999;	99US-0157117P.
PR	13-JUL-1999;	99US-0143442P.	PR	05-OCT-1999;	99US-0157753P.
PR	14-JUL-1999;	99US-0143432P.	PR	06-OCT-1999;	99US-0157865P.
PR	15-JUL-1999;	99US-0144005P.	PR	07-OCT-1999;	99US-0158029P.
PR	16-JUL-1999;	99US-0144085P.	PR	08-OCT-1999;	99US-015832P.
PR	16-JUL-1999;	99US-0144086P.	PR	12-OCT-1999;	99US-0158369P.
PR	19-JUL-1999;	99US-014425P.	PR	13-OCT-1999;	99US-0158293P.
PR	19-JUL-1999;	99US-0144331P.	PR	13-OCT-1999;	99US-0158294P.
PR	19-JUL-1999;	99US-0144332P.	PR	13-OCT-1999;	99US-0158295P.
PR	19-JUL-1999;	99US-0144333P.	PR	14-OCT-1999;	99US-0158329P.
PR	19-JUL-1999;	99US-0144334P.	PR	14-OCT-1999;	99US-0158330P.
PR	19-JUL-1999;	99US-0144335P.	PR	14-OCT-1999;	99US-0158331P.
PR	20-JUL-1999;	99US-0144352P.	PR	14-OCT-1999;	99US-0158337P.
PR	20-JUL-1999;	99US-0144488P.	PR	14-OCT-1999;	99US-0158638P.
PR	21-JUL-1999;	99US-0144514P.	PR	21-OCT-1999;	99US-0161406P.
PR	21-JUL-1999;	99US-0145086P.	PR	22-OCT-1999;	99US-0161359P.
PR	21-JUL-1999;	99US-0145089P.	PR	22-OCT-1999;	99US-0161360P.
PR	22-JUL-1999;	99US-0145244P.	PR	22-OCT-1999;	99US-01616768P.
PR	22-JUL-1999;	99US-014532P.	PR	22-OCT-1999;	99US-0160770P.
PR	22-JUL-1999;	99US-0145087P.	PR	25-OCT-1999;	99US-0161404P.
PR	22-JUL-1999;	99US-0145089P.	PR	25-OCT-1999;	99US-0161405P.
PR	22-JUL-1999;	99US-0145142P.	PR	25-OCT-1999;	99US-0161406P.
PR	23-JUL-1999;	99US-0145145P.	PR	26-OCT-1999;	99US-0161360P.
PR	28-JUL-1999;	99US-014551P.	PR	26-OCT-1999;	99US-0161719P.
PR	02-AUG-1999;	99US-0146346P.	PR	26-OCT-1999;	99US-0161361P.
PR	02-AUG-1999;	99US-0146388P.	PR	28-OCT-1999;	99US-0161920P.
PR	03-AUG-1999;	99US-0146389P.	PR	28-OCT-1999;	99US-0161920P.
PR	04-AUG-1999;	99US-0147024P.	PR	28-OCT-1999;	99US-0161933P.
PR	04-AUG-1999;	99US-0147302P.	PR	29-OCT-1999;	99US-0161442P.
			Alignment Scores:	7.55	
			Pred. No.:	45.00	
			Score:	Percent Similarity:	100.0%
			Matches:	7	
			Conservative:	1	

Best Local Similarity: 87.5% Mismatches: 0  
 Query Match: 84.9% Indels: 0  
 DB: 3 Gaps: 0

US-10-717-243-59 (1-28) x AAG60325 (1-321)

Qy 25 AAAATGAGTCCTGTTCACATTG 2  
 Db 206 LysMetLeuAlaCysPheThrCys 213

RESULT 12

AAG60325 standard; protein; 327 AA.

XX AC AAG60325;  
 XX DT 18-OCT-2000 (first entry)  
 XX DE Arabidopsis thaliana protein fragment SEQ ID NO: 78134.  
 XX DE Protein identification; signal transduction pathway; metabolic pathway;  
 KW hybridisation assay; genetic mapping; gene expression control; promoter;  
 KW termination sequence.  
 XX OS Arabidopsis thaliana.  
 XX PN EP1033405-A2.  
 XX PD 06-SEP-2000.  
 XX PF 25-FEB-2000; 20000EP-00301439.  
 XX PR 25-FEB-1999; 99US-0121828P.  
 PR 05-MAR-1999; 99US-0123180P.  
 PR 09-MAR-1999; 99US-0123545P.  
 PR 23-MAR-1999; 99US-0125788P.  
 PR 25-MAR-1999; 99US-012665P.  
 PR 29-MAR-1999; 99US-0126765P.  
 PR 01-APR-1999; 99US-0127422P.  
 PR 06-APR-1999; 99US-0128234P.  
 PR 08-APR-1999; 99US-0128714P.  
 PR 16-APR-1999; 99US-0129845P.  
 PR 19-APR-1999; 99US-0130077P.  
 PR 21-APR-1999; 99US-0130419P.  
 PR 23-APR-1999; 99US-0130510P.  
 PR 23-APR-1999; 99US-0132342P.  
 PR 28-APR-1999; 99US-0131449P.  
 PR 30-APR-1999; 99US-0132048P.  
 PR 30-APR-1999; 99US-0132540P.  
 PR 04-MAY-1999; 99US-0132484P.  
 PR 05-MAY-1999; 99US-0133050P.  
 PR 06-MAY-1999; 99US-0130894P.  
 PR 06-MAY-1999; 99US-0131449P.  
 PR 07-MAY-1999; 99US-0132863P.  
 PR 11-MAY-1999; 99US-013255P.  
 PR 14-MAY-1999; 99US-01334218P.  
 PR 14-MAY-1999; 99US-01334219P.  
 PR 14-MAY-1999; 99US-0134222P.  
 PR 14-MAY-1999; 99US-0134488P.  
 PR 18-MAY-1999; 99US-01334487P.  
 PR 18-MAY-1999; 99US-0134768P.  
 PR 19-MAY-1999; 99US-0134941P.  
 PR 20-MAY-1999; 99US-0135124P.  
 PR 21-MAY-1999; 99US-0133535P.  
 PR 24-MAY-1999; 99US-0135629P.  
 PR 25-MAY-1999; 99US-0136021P.  
 PR 27-MAY-1999; 99US-0133639P.  
 PR 28-MAY-1999; 99US-0136788P.  
 PR 03-JUN-1999; 99US-0137228P.  
 PR 04-JUN-1999; 99US-0137502P.  
 PR 07-JUN-1999; 99US-0137724P.  
 PR 08-JUN-1999; 99US-0133809P.  
 PR 10-JUN-1999; 99US-0133854P.

XX PR 10-JUN-1999; 99US-01338847P.  
 PR 14-JUN-1999; 99US-0139119P.  
 PR 16-JUN-1999; 99US-013452P.  
 PR 16-JUN-1999; 99US-013453P.  
 PR 17-JUN-1999; 99US-013492P.  
 PR 18-JUN-1999; 99US-013454P.  
 PR 18-JUN-1999; 99US-013455P.  
 PR 18-JUN-1999; 99US-013456P.  
 PR 18-JUN-1999; 99US-013457P.  
 PR 18-JUN-1999; 99US-013458P.  
 PR 18-JUN-1999; 99US-013459P.  
 PR 18-JUN-1999; 99US-013460P.  
 PR 18-JUN-1999; 99US-013461P.  
 PR 18-JUN-1999; 99US-013462P.  
 PR 18-JUN-1999; 99US-013463P.  
 PR 18-JUN-1999; 99US-0134750P.  
 PR 18-JUN-1999; 99US-0137763P.  
 PR 18-JUN-1999; 99US-0138817P.  
 PR 21-JUN-1999; 99US-013899P.  
 PR 22-JUN-1999; 99US-014353P.  
 PR 23-JUN-1999; 99US-014354P.  
 PR 23-JUN-1999; 99US-014354P.  
 PR 24-JUN-1999; 99US-014695P.  
 PR 28-JUN-1999; 99US-014823P.  
 PR 29-JUN-1999; 99US-014991P.  
 PR 30-JUN-1999; 99US-014287P.  
 PR 01-JUL-1999; 99US-0141842P.  
 PR 01-JUL-1999; 99US-0142154P.  
 PR 02-JUL-1999; 99US-0142390P.  
 PR 06-JUL-1999; 99US-0143803P.  
 PR 08-JUL-1999; 99US-0143920P.  
 PR 09-JUL-1999; 99US-0143977P.  
 PR 12-JUL-1999; 99US-0143542P.  
 PR 13-JUL-1999; 99US-0143542P.  
 PR 14-JUL-1999; 99US-014624P.  
 PR 15-JUL-1999; 99US-0141005P.  
 PR 16-JUL-1999; 99US-0144085P.  
 PR 16-JUL-1999; 99US-0144086P.  
 PR 19-JUL-1999; 99US-0143325P.  
 PR 19-JUL-1999; 99US-0143331P.  
 PR 19-JUL-1999; 99US-0143332P.  
 PR 19-JUL-1999; 99US-0143333P.  
 PR 19-JUL-1999; 99US-0144334P.  
 PR 19-JUL-1999; 99US-0144335P.  
 PR 20-JUL-1999; 99US-0144335P.  
 PR 20-JUL-1999; 99US-0146322P.  
 PR 20-JUL-1999; 99US-0144884P.  
 PR 21-JUL-1999; 99US-0144814P.  
 PR 23-JUL-1999; 99US-0145086P.  
 PR 23-JUL-1999; 99US-0145088P.  
 PR 23-JUL-1999; 99US-0145218P.  
 PR 24-JUL-1999; 99US-0145224P.  
 PR 26-JUL-1999; 99US-0145276P.  
 PR 22-JUL-1999; 99US-0145087P.  
 PR 27-JUL-1999; 99US-0145913P.  
 PR 27-JUL-1999; 99US-014518P.  
 PR 27-JUL-1999; 99US-0145145P.  
 PR 28-JUL-1999; 99US-014551P.  
 PR 02-AUG-1999; 99US-0147102P.  
 PR 05-AUG-1999; 99US-0147192P.  
 PR 05-AUG-1999; 99US-0147260P.  
 PR 02-AUG-1999; 99US-0145389P.  
 PR 03-AUG-1999; 99US-0147038P.  
 PR 04-AUG-1999; 99US-0147204P.  
 PR 04-AUG-1999; 99US-0147102P.  
 PR 05-AUG-1999; 99US-0147224P.  
 PR 05-AUG-1999; 99US-014760P.  
 PR 06-AUG-1999; 99US-014703P.  
 PR 06-AUG-1999; 99US-0147416P.  
 PR 09-AUG-1999; 99US-0147493P.  
 PR 09-AUG-1999; 99US-0147335P.

DB:	3	Gaps:	0
PR 10-AUG-1999;	99US-0148171P.		
PR 11-AUG-1999;	99US-0148319P.		
PR 12-AUG-1999;	99US-0148341P.		
PR 13-AUG-1999;	99US-0148341P.		
PR 13-AUG-1999;	99US-0148365P.		
PR 16-AUG-1999;	99US-0148684P.		
PR 16-AUG-1999;	99US-0148684P.		
PR 17-AUG-1999;	99US-0149475P.		
PR 18-AUG-1999;	99US-0149426P.		
PR 20-AUG-1999;	99US-0149423P.		
PR 20-AUG-1999;	99US-014923P.		
PR 23-AUG-1999;	99US-0149829P.		
PR 23-AUG-1999;	99US-0149829P.		
PR 25-AUG-1999;	99US-0149303P.		
PR 26-AUG-1999;	99US-0150566P.		
PR 01-SEP-1999;	99US-015088P.		
PR 07-SEP-1999;	99US-0151065P.		
PR 27-AUG-1999;	99US-014970P.		
PR 27-AUG-1999;	99US-0151066P.		
PR 27-AUG-1999;	99US-0151080P.		
PR 30-AUG-1999;	99US-015143BP.		
PR 31-AUG-1999;	99US-015143BP.		
PR 01-SEP-1999;	99US-01519P.		
PR 07-SEP-1999;	99US-0152363P.		
PR 10-SEP-1999;	99US-0153070P.		
PR 13-SEP-1999;	99US-0153175P.		
PR 15-SEP-1999;	99US-0154018P.		
PR 16-SEP-1999;	99US-0154039P.		
PR 20-SEP-1999;	99US-0154779P.		
PR 22-SEP-1999;	99US-0155139P.		
PR 23-SEP-1999;	99US-0155486P.		
PR 24-SEP-1999;	99US-0155559P.		
PR 28-SEP-1999;	99US-0156558P.		
PR 29-SEP-1999;	99US-0156559P.		
PR 04-OCT-1999;	99US-0157117P.		
PR 05-OCT-1999;	99US-0157553P.		
PR 06-OCT-1999;	99US-0157865P.		
PR 07-OCT-1999;	99US-0158029P.		
PR 08-OCT-1999;	99US-0158332P.		
PR 12-OCT-1999;	99US-0158369P.		
PR 13-OCT-1999;	99US-0159293P.		
PR 13-OCT-1999;	99US-0159394P.		
PR 13-OCT-1999;	99US-0159295P.		
PR 14-OCT-1999;	99US-0159329P.		
PR 14-OCT-1999;	99US-0159330P.		
PR 14-OCT-1999;	99US-0159331P.		
PR 14-OCT-1999;	99US-0159337P.		
PR 14-OCT-1999;	99US-01596338P.		
PR 18-OCT-1999;	99US-0159848P.		
PR 21-OCT-1999;	99US-0160741P.		
PR 21-OCT-1999;	99US-0160767P.		
PR 21-OCT-1999;	99US-0160768P.		
PR 21-OCT-1999;	99US-0160770P.		
PR 21-OCT-1999;	99US-0160814P.		
PR 25-OCT-1999;	99US-0161405P.		
PR 25-OCT-1999;	99US-0161406P.		
PR 26-OCT-1999;	99US-0161359P.		
PR 26-OCT-1999;	99US-0161360P.		
PR 26-OCT-1999;	99US-0160989P.		
PR 25-OCT-1999;	99US-0161404P.		
PR 28-OCT-1999;	99US-0161992P.		
PR 28-OCT-1999;	99US-0161993P.		
PR 29-OCT-1999;	99US-0162142P.		
Qy 25	AAAATGAGTCTGTTATACATGT	2	
Db 218	LysMethylsAlacysPhethrcys	225	
RESULT 1.3			
ID AAG04860	ID AAG04860 standard; protein; 344 AA.		
XX	XX		
AC	AC		
XX	XX		
DT 17-OCT-2000	(first entry)		
XX	XX		
DE Arabidopsis thaliana protein fragment SEQ ID NO: 1047.			
XX	XX		
Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; termination sequence.			
XX	XX		
OS Arabidopsis thaliana.			
XX	XX		
EP1033405-A2.	EP1033405-A2.		
XX	XX		
PD 06-SEP-2000.	PD 06-SEP-2000.		
XX	XX		
PF 25-FEB-2000;	20000EP-00301439.		
XX	XX		
PR 25-FEB-1999;	99US-0121825P.		
PR 05-MAR-1999;	99US-0123180P.		
PR 09-MAR-1999;	99US-0123548P.		
PR 23-MAR-1999;	99US-0125788P.		
PR 25-MAR-1999;	99US-0126264P.		
PR 29-MAR-1999;	99US-0126785P.		
PR 01-APR-1999;	99US-0127462P.		
PR 06-APR-1999;	99US-0128234P.		
PR 08-APR-1999;	99US-0128714P.		
PR 16-APR-1999;	99US-0129845P.		
PR 19-APR-1999;	99US-0130077P.		
PR 21-APR-1999;	99US-0130449P.		
PR 23-APR-1999;	99US-0130510P.		
PR 28-APR-1999;	99US-0130891P.		
PR 30-APR-1999;	99US-0132048P.		
PR 04-MAY-1999;	99US-0132407P.		
PR 05-MAY-1999;	99US-0132485P.		
PR 06-MAY-1999;	99US-0132486P.		
PR 07-MAY-1999;	99US-0132863P.		
PR 11-MAY-1999;	99US-0134256P.		
PR 14-MAY-1999;	99US-0134218P.		
PR 14-MAY-1999;	99US-0134219P.		
PR 14-MAY-1999;	99US-0134221P.		
PR 14-MAY-1999;	99US-0134370P.		
PR 18-MAY-1999;	99US-0134768P.		
PR 19-MAY-1999;	99US-0134941P.		
PR 20-MAY-1999;	99US-0135124P.		
PR 21-MAY-1999;	99US-0135353P.		
PR 24-MAY-1999;	99US-0135629P.		
PR 25-MAY-1999;	99US-0136021P.		
PR 27-MAY-1999;	99US-0136392P.		
PR 28-MAY-1999;	99US-0136782P.		
PR 01-JUN-1999;	99US-0137222P.		
PR 03-JUN-1999;	99US-013752B.		
PR 04-JUN-1999;	99US-0137502P.		
PR 07-JUN-1999;	99US-0137724P.		
PR 08-JUN-1999;	99US-0138094P.		
PR 10-JUN-1999;	99US-0138540P.		
PR 10-JUN-1999;	99US-0138841P.		
PR 14-JUN-1999;	99US-0139111P.		
Length: 327			
Matches: 7			
Conservative: 1			
Mismatches: 0			
Indels: 0			
Alignment Scores:			
Prd. No.:	7.55		
Score: 45.00			
Percent Similarity: 100 %			
Local Similarity: 87.5 %			
Query Match: 84.9 %			

PR	16-JUN-1999;	99US-0139452P.	PR	12-AUG-1999;	99US-014B341P.
PR	16-JUN-1999;	99US-0139453P.	PR	13-AUG-1999;	99US-014B365P.
PR	17-JUN-1999;	99US-0139492P.	PR	13-AUG-1999;	99US-014B364P.
PR	18-JUN-1999;	99US-0139451P.	PR	16-AUG-1999;	99US-014B368P.
PR	18-JUN-1999;	99US-0139452P.	PR	17-AUG-1999;	99US-014B175P.
PR	18-JUN-1999;	99US-0139453P.	PR	18-AUG-1999;	99US-014B26P.
PR	18-JUN-1999;	99US-0139454P.	PR	20-AUG-1999;	99US-014B722P.
PR	18-JUN-1999;	99US-0139455P.	PR	20-AUG-1999;	99US-014B723P.
PR	18-JUN-1999;	99US-0139456P.	PR	20-AUG-1999;	99US-014B29P.
PR	18-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-014B902P.
PR	18-JUN-1999;	99US-0139462P.	PR	23-AUG-1999;	99US-015A103P.
PR	23-JUN-1999;	99US-0139463P.	PR	25-AUG-1999;	99US-015A066P.
PR	23-JUN-1999;	99US-0139464P.	PR	26-AUG-1999;	99US-015A084P.
PR	18-JUN-1999;	99US-01366P.	PR	27-AUG-1999;	99US-015A105P.
PR	18-JUN-1999;	99US-013975P.	PR	27-AUG-1999;	99US-015A066P.
PR	18-JUN-1999;	99US-013976P.	PR	27-AUG-1999;	99US-015A080P.
PR	21-JUN-1999;	99US-013981P.	PR	27-AUG-1999;	99US-015A082P.
PR	21-JUN-1999;	99US-013989P.	PR	30-AUG-1999;	99US-015A103P.
PR	01-JUL-1999;	99US-014035P.	PR	17-AUG-1999;	99US-015A138P.
PR	01-JUL-1999;	99US-014035P.	PR	01-SEP-1999;	99US-015A130P.
PR	28-JUN-1999;	99US-014082P.	PR	07-SEP-1999;	99US-015A233P.
PR	29-JUN-1999;	99US-014099P.	PR	10-SEP-1999;	99US-015A307P.
PR	08-JUL-1999;	99US-014128P.	PR	13-SEP-1999;	99US-015A359P.
PR	12-JUL-1999;	99US-014184P.	PR	15-SEP-1999;	99US-015A408P.
PR	01-JUL-1999;	99US-014215P.	PR	16-SEP-1999;	99US-015A409P.
PR	02-JUL-1999;	99US-014205P.	PR	20-SEP-1999;	99US-015A477P.
PR	06-JUL-1999;	99US-014239P.	PR	22-SEP-1999;	99US-015A539P.
PR	08-JUL-1999;	99US-014280P.	PR	23-SEP-1999;	99US-015A586P.
PR	09-JUL-1999;	99US-014292P.	PR	24-SEP-1999;	99US-015A589P.
PR	09-JUL-1999;	99US-014297P.	PR	16-SEP-1999;	99US-015A619P.
PR	13-JUL-1999;	99US-014354P.	PR	29-SEP-1999;	99US-015A696P.
PR	14-JUL-1999;	99US-014362P.	PR	04-OCT-1999;	99US-015A717P.
PR	15-JUL-1999;	99US-014400P.	PR	05-OCT-1999;	99US-015A7753P.
PR	16-JUL-1999;	99US-014408P.	PR	23-OCT-1999;	99US-015A865P.
PR	19-JUL-1999;	99US-014408P.	PR	24-OCT-1999;	99US-015A859P.
PR	20-JUL-1999;	99US-014432P.	PR	28-SEP-1999;	99US-015B232P.
PR	20-JUL-1999;	99US-014432P.	PR	12-OCT-1999;	99US-015B169P.
PR	19-JUL-1999;	99US-014433P.	PR	14-OCT-1999;	99US-015B293P.
PR	19-JUL-1999;	99US-014433P.	PR	13-OCT-1999;	99US-015B234P.
PR	19-JUL-1999;	99US-014433P.	PR	06-OCT-1999;	99US-015B25P.
PR	19-JUL-1999;	99US-014433P.	PR	14-OCT-1999;	99US-015B299P.
PR	19-JUL-1999;	99US-014433P.	PR	08-OCT-1999;	99US-015B310P.
PR	20-JUL-1999;	99US-014435P.	PR	12-OCT-1999;	99US-015B311P.
PR	20-JUL-1999;	99US-014435P.	PR	14-OCT-1999;	99US-015B637P.
PR	19-JUL-1999;	99US-014563P.	PR	13-OCT-1999;	99US-015B179P.
PR	19-JUL-1999;	99US-014433P.	PR	14-OCT-1999;	99US-015B618P.
PR	21-JUL-1999;	99US-014481P.	PR	13-OCT-1999;	99US-015B584P.
PR	21-JUL-1999;	99US-014508P.	PR	14-OCT-1999;	99US-015B25P.
PR	23-JUL-1999;	99US-014514P.	PR	21-OCT-1999;	99US-016D741P.
PR	23-JUL-1999;	99US-014521P.	PR	21-OCT-1999;	99US-016D767P.
PR	23-JUL-1999;	99US-014522P.	PR	22-OCT-1999;	99US-016D768P.
PR	26-JUL-1999;	99US-014576P.	PR	21-OCT-1999;	99US-016D70P.
PR	26-JUL-1999;	99US-014576P.	PR	25-OCT-1999;	99US-016D140P.
PR	02-AUG-1999;	99US-014509P.	PR	21-OCT-1999;	99US-016D105P.
PR	03-AUG-1999;	99US-014519P.	PR	25-OCT-1999;	99US-016D106P.
PR	04-AUG-1999;	99US-014591P.	PR	26-OCT-1999;	99US-016D155P.
PR	04-AUG-1999;	99US-014730P.	PR	22-OCT-1999;	99US-016D980P.
PR	05-AUG-1999;	99US-014760P.	PR	26-OCT-1999;	99US-016D981P.
PR	06-AUG-1999;	99US-014730P.	PR	22-OCT-1999;	99US-016D980P.
PR	09-AUG-1999;	99US-014719P.	PR	26-OCT-1999;	99US-016D161P.
PR	09-AUG-1999;	99US-014749P.	PR	28-OCT-1999;	99US-016D192P.
PR	10-AUG-1999;	99US-014817P.	PR	28-OCT-1999;	99US-016D192P.
PR	11-AUG-1999;	99US-014831P.	PR	29-OCT-1999;	99US-016D2142P.

Alignment Scores:  
Pred. No.: 7.56  
Score: 45.00  
Percent Similarity: 100.0%  
Best Local Similarity: 87.5%  
Query Match: 84.9%  
DB: 3

Length: 344  
Matches: 7  
Conservative: 1  
Mismatched: 0  
Indels: 0  
Gaps: 0

US-10-717-243-59 (1-28) x AAG04860 (1-344)

Qy 25 AAATGAGCTCTGGTTACATGT 2  
   |:|||:|||:|||:|||:|||:  
 Db 206 LysmetrylAlaCysPheThrCys 213

RESULT 14

AAG59640

ID AAG59640 standard; protein; 345 AA.

AC AAG59640;

XX DT 18-OCT-2000 (first entry)

DB Arabidopsis thaliana protein Fragment SEQ ID NO: 77164.

KW Protein identification; signal transduction pathway; metabolic pathway;

KW hybridisation assay; genetic mapping; gene expression control; promoter;

KW termination sequence.

XX OS Arabidopsis thaliana.

XX PN EP1033405-A2.

XX PD 06-SEP-2000.

XX PP 25-FEB-2000; 2000EP-00301439.

PR 25-FEB-1999; 99US-0121625P.

PR 05-MAR-1999; 99US-0123190P.

PR 09-MAR-1999; 99US-0123548P.

PR 25-MAR-1999; 99US-0125788P.

PR 29-MAR-1999; 99US-0126564P.

PR 01-APR-1999; 99US-0127462P.

PR 06-APR-1999; 99US-0128234P.

PR 08-APR-1999; 99US-0128714P.

PR 16-APR-1999; 99US-0129845P.

PR 19-APR-1999; 99US-0130077P.

PR 21-APR-1999; 99US-0130449P.

PR 23-APR-1999; 99US-0130510P.

PR 28-APR-1999; 99US-0130891P.

PR 30-APR-1999; 99US-0132048P.

PR 04-MAY-1999; 99US-0132407P.

PR 06-MAY-1999; 99US-0132485P.

PR 06-MAY-1999; 99US-0132486P.

PR 11-MAY-1999; 99US-0132456P.

PR 14-MAY-1999; 99US-0134248P.

PR 14-MAY-1999; 99US-0134219P.

PR 14-MAY-1999; 99US-0134221P.

PR 14-MAY-1999; 99US-0134370P.

PR 27-MAY-1999; 99US-0134768P.

PR 19-MAY-1999; 99US-0134941P.

PR 20-MAY-1999; 99US-0135124P.

PR 24-MAY-1999; 99US-0135553P.

PR 25-MAY-1999; 99US-0135629P.

PR 27-MAY-1999; 99US-0136022P.

PR 28-MAY-1999; 99US-0136392P.

PR 01-JUN-1999; 99US-0137222P.

PR 04-JUN-1999; 99US-0137528P.

PR 07-JUN-1999; 99US-0137724P.

PR 10-JUN-1999; 99US-0138540P.

PR 10-JUN-1999; 99US-0138847P.

PR 16-JUN-1999; 99US-0139452P.

PR 16-JUN-1999; 99US-0139453P.

PR 17-JUN-1999; 99US-0139492P.  
   PR 18-JUN-1999; 99US-0139454P.  
   PR 18-JUN-1999; 99US-0139455P.  
   PR 18-JUN-1999; 99US-0139456P.  
   PR 18-JUN-1999; 99US-0139457P.  
   PR 18-JUN-1999; 99US-0139458P.  
   PR 18-JUN-1999; 99US-0139459P.  
   PR 18-JUN-1999; 99US-0139460P.  
   PR 18-JUN-1999; 99US-0139461P.  
   PR 18-JUN-1999; 99US-0139462P.  
   PR 18-JUN-1999; 99US-0139463P.  
   PR 18-JUN-1999; 99US-0139464P.  
   PR 18-JUN-1999; 99US-0139750P.  
   PR 18-JUN-1999; 99US-0139763P.  
   PR 21-JUN-1999; 99US-0139817P.  
   PR 22-JUN-1999; 99US-0139899P.  
   PR 23-JUN-1999; 99US-014353P.  
   PR 24-JUN-1999; 99US-014695P.  
   PR 28-JUN-1999; 99US-0149823P.  
   PR 29-JUN-1999; 99US-014991P.  
   PR 30-JUN-1999; 99US-014992P.  
   PR 01-JUL-1999; 99US-014287P.  
   PR 01-JUL-1999; 99US-0142154P.  
   PR 02-JUL-1999; 99US-014055P.  
   PR 06-JUL-1999; 99US-0142390P.  
   PR 08-JUL-1999; 99US-0142803P.  
   PR 09-JUL-1999; 99US-0142920P.  
   PR 12-JUL-1999; 99US-0142977P.  
   PR 13-JUL-1999; 99US-014354P.  
   PR 14-JUL-1999; 99US-0143624P.  
   PR 15-JUL-1999; 99US-0144005P.  
   PR 16-JUL-1999; 99US-0144085P.  
   PR 16-JUL-1999; 99US-0144086P.  
   PR 19-JUL-1999; 99US-0144325P.  
   PR 19-JUL-1999; 99US-0144331P.  
   PR 19-JUL-1999; 99US-0144332P.  
   PR 19-JUL-1999; 99US-0144333P.  
   PR 19-JUL-1999; 99US-0144334P.  
   PR 19-JUL-1999; 99US-0144335P.  
   PR 20-JUL-1999; 99US-0144632P.  
   PR 20-JUL-1999; 99US-0144884P.  
   PR 21-JUL-1999; 99US-0144814P.  
   PR 21-JUL-1999; 99US-0145086P.  
   PR 21-JUL-1999; 99US-0145088P.  
   PR 22-JUL-1999; 99US-0145085P.  
   PR 22-JUL-1999; 99US-0145276P.  
   PR 22-JUL-1999; 99US-0145913P.  
   PR 27-JUL-1999; 99US-014704P.  
   PR 27-JUL-1999; 99US-014704P.  
   PR 28-JUL-1999; 99US-0147204P.  
   PR 04-AUG-1999; 99US-0147302P.  
   PR 05-AUG-1999; 99US-0147386P.  
   PR 05-AUG-1999; 99US-014760P.  
   PR 06-AUG-1999; 99US-0147303P.  
   PR 06-AUG-1999; 99US-0147416P.  
   PR 09-AUG-1999; 99US-0147493P.  
   PR 09-AUG-1999; 99US-0147935P.  
   PR 10-AUG-1999; 99US-0148171P.  
   PR 11-AUG-1999; 99US-014819P.  
   PR 12-AUG-1999; 99US-0148341P.  
   PR 13-AUG-1999; 99US-0148655P.

PR	13-AUG-1999;	99US-0148684P.	Qy	25 AAATGAAAGCTTGTTCATGT	2
PR	16-AUG-1999;	99US-0149368P.	Db	206 LysMetLysAlaCysSphetTrsCys	213
PR	17-AUG-1999;	99US-0149170P.			
PR	18-AUG-1999;	99US-0149428P.	RESULT 15		
PR	20-AUG-1999;	99US-0149722P.	ID	AAG04859	
PR	20-AUG-1999;	99US-0149723P.			
PR	20-AUG-1999;	99US-0149922P.	XX		
PR	23-AUG-1999;	99US-0149902P.	AC	AAG04859;	
PR	23-AUG-1999;	99US-0149930P.	XX		
PR	25-AUG-1999;	99US-0150568P.	XX		
PR	26-AUG-1999;	99US-0150884P.	DT	17-Oct-2000	(first entry)
PR	27-AUG-1999;	99US-0151065P.	XX		
PR	27-AUG-1999;	99US-0151066P.	DE	Arabidopsis thaliana protein fragment SEQ ID NO: 1046	
PR	30-AUG-1999;	99US-0151303P.	KW	Protein identification; signal transduction pathway; metabolic pathway;	
PR	31-AUG-1999;	99US-0151438P.	KW	hybridisation assay; genetic mapping; gene expression control; promoter;	
PR	01-SEP-1999;	99US-0151930P.	KW	termination sequence.	
PR	07-SEP-1999;	99US-0152363P.	XX		
PR	10-SEP-1999;	99US-0153070P.	OS	Arabidopsis thaliana.	
PR	13-SEP-1999;	99US-0153758P.	XX		
PR	15-SEP-1999;	99US-0154018P.	PN		
PR	16-SEP-1999;	99US-0154039P.	XX		
PR	20-SEP-1999;	99US-0154779P.	PD	06-SEP-2000	
PR	22-SEP-1999;	99US-0155138P.	XX		
PR	23-SEP-1999;	99US-0155488P.	PP	25-FEB-2000;	20000EP-00301439.
PR	24-SEP-1999;	99US-0155655P.	XX		
PR	28-SEP-1999;	99US-0156458P.	PR	25-FEB-1999;	99US-0121825P.
PR	29-SEP-1999;	99US-0156590P.	PR	05-MAR-1999;	99US-0123180P.
PR	04-OCT-1999;	99US-0157117P.	PR	09-MAR-1999;	99US-012548P.
PR	05-OCT-1999;	99US-0157753P.	PR	23-MAR-1999;	99US-0125788P.
PR	06-OCT-1999;	99US-0157865P.	PR	25-MAR-1999;	99US-0126264P.
PR	07-OCT-1999;	99US-0158028P.	PR	29-MAR-1999;	99US-0126785P.
PR	08-OCT-1999;	99US-0158231P.	PR	01-APR-1999;	99US-0127462P.
PR	12-OCT-1999;	99US-0158365P.	PR	06-APR-1999;	99US-0128234P.
PR	13-OCT-1999;	99US-0159298P.	PR	08-APR-1999;	99US-0128114P.
PR	13-OCT-1999;	99US-0159299P.	PR	16-APR-1999;	99US-012845P.
PR	18-OCT-1999;	99US-0159590P.	PR	19-APR-1999;	99US-0130077P.
PR	14-OCT-1999;	99US-0159323P.	PR	21-APR-1999;	99US-0130494P.
PR	14-OCT-1999;	99US-0159333P.	PR	23-APR-1999;	99US-0130510P.
PR	21-OCT-1999;	99US-0160741P.	PR	23-APR-1999;	99US-0130891P.
PR	21-OCT-1999;	99US-0160767P.	PR	28-APR-1999;	99US-0132449P.
PR	23-OCT-1999;	99US-0160770P.	PR	30-APR-1999;	99US-0132048P.
PR	25-OCT-1999;	99US-0160814P.	PR	30-APR-1999;	99US-0132407P.
PR	25-OCT-1999;	99US-0160815P.	PR	04-MAY-1999;	99US-0132484P.
PR	22-OCT-1999;	99US-0160980P.	PR	05-MAY-1999;	99US-0132485P.
PR	22-OCT-1999;	99US-0160988P.	PR	06-MAY-1999;	99US-0132486P.
PR	26-OCT-1999;	99US-0161365P.	PR	06-MAY-1999;	99US-0132487P.
PR	28-OCT-1999;	99US-0161404P.	PR	07-MAY-1999;	99US-0132463P.
PR	28-OCT-1999;	99US-0161405P.	PR	11-MAY-1999;	99US-0134491P.
PR	28-OCT-1999;	99US-0161406P.	PR	14-MAY-1999;	99US-0134218P.
PR	29-OCT-1999;	99US-0161359P.	PR	14-MAY-1999;	99US-0134219P.
PR	26-OCT-1999;	99US-0161366P.	PR	14-MAY-1999;	99US-0134221P.
PR	26-OCT-1999;	99US-0161404P.	PR	14-MAY-1999;	99US-0134370P.
PR	28-OCT-1999;	99US-0161920P.	PR	18-MAY-1999;	99US-0134768P.
PR	28-OCT-1999;	99US-0161990P.	PR	19-MAY-1999;	99US-0134632P.
PR	28-OCT-1999;	99US-0161993P.	PR	20-MAY-1999;	99US-0136782P.
PR	29-OCT-1999;	99US-0162142P.	PR	01-JUN-1999;	99US-013722P.
PR			PR	03-JUN-1999;	99US-013753P.
PR			PR	04-JUN-1999;	99US-0137502P.
Score:	45.00		PR	07-JUN-1999;	99US-013724P.
Percent Similarity:	100.0%		PR	08-JUN-1999;	99US-013804P.
Best Local Similarity:	87.5%		PR	10-JUN-1999;	99US-0138340P.
Query Match:	84.9%		PR	14-JUN-1999;	99US-0138847P.
DB:	3		PR	16-JUN-1999;	99US-0139452P.
PR	Sat Feb 18 17:26:09 2006	x AAG59640 (1-345)	PR	17-JUN-1999;	99US-0139453P.
PR			PR	18-JUN-1999;	99US-0139454P.

PR	18-JUN-1999;	99US-0139455P.	PR	18-AUG-1999;	99US-0149175P.	Length:	356
PR	18-JUN-1999;	99US-0139456P.	PR	18-AUG-1999;	99US-0149426P.	Matches:	7
PR	18-JUN-1999;	99US-0139457P.	PR	20-AUG-1999;	99US-0149722P.	Percent Similarity:	1
PR	18-JUN-1999;	99US-0139458P.	PR	20-AUG-1999;	99US-0149723P.	Best Local Similarity:	87.5%
PR	18-JUN-1999;	99US-0139459P.	PR	20-AUG-1999;	99US-0149829P.	Query Match:	84.9%
PR	18-JUN-1999;	99US-0139460P.	PR	23-AUG-1999;	99US-0149902P.	DB:	0
PR	18-JUN-1999;	99US-0139461P.	PR	23-AUG-1999;	99US-0149930P.	Gaps:	
PR	18-JUN-1999;	99US-0139462P.	PR	25-AUG-1999;	99US-0150566P.		
PR	18-JUN-1999;	99US-0139463P.	PR	26-AUG-1999;	99US-0150844P.		
PR	18-JUN-1999;	99US-0139763P.	PR	27-AUG-1999;	99US-0151065P.		
PR	21-JUN-1999;	99US-0139817P.	PR	27-AUG-1999;	99US-0151066P.		
PR	22-JUN-1999;	99US-0139899P.	PR	30-AUG-1999;	99US-0151303P.		
PR	23-JUN-1999;	99US-0140153P.	PR	31-AUG-1999;	99US-0151438P.		
PR	23-JUN-1999;	99US-0140154P.	PR	01-SEP-1999;	99US-0151930P.		
PR	24-JUN-1999;	99US-0140595P.	PR	07-SEP-1999;	99US-0152363P.		
PR	28-JUN-1999;	99US-0140823P.	PR	10-SEP-1999;	99US-0152070P.		
PR	29-JUN-1999;	99US-0140911P.	PR	13-SEP-1999;	99US-0152758P.		
PR	30-JUN-1999;	99US-0139899P.	PR	15-SEP-1999;	99US-0154018P.		
PR	01-JUL-1999;	99US-0140184P.	PR	16-SEP-1999;	99US-0154039P.		
PR	01-JUL-1999;	99US-0142158P.	PR	20-SEP-1999;	99US-0154779P.		
PR	02-JUL-1999;	99US-0142055P.	PR	22-SEP-1999;	99US-0155139P.		
PR	06-JUL-1999;	99US-0142390P.	PR	23-SEP-1999;	99US-0155486P.		
PR	08-JUL-1999;	99US-0142805P.	PR	24-SEP-1999;	99US-0156159P.		
PR	09-JUL-1999;	99US-0141287P.	PR	28-SEP-1999;	99US-0156458P.		
PR	12-JUL-1999;	99US-0142917P.	PR	29-SEP-1999;	99US-0156596P.		
PR	13-JUL-1999;	99US-0143342P.	PR	04-OCT-1999;	99US-0157117P.		
PR	14-JUL-1999;	99US-0143624P.	PR	05-OCT-1999;	99US-0157533P.		
PR	15-JUL-1999;	99US-0144005P.	PR	06-OCT-1999;	99US-0157865P.		
PR	16-JUL-1999;	99US-0144134P.	PR	07-OCT-1999;	99US-0158029P.		
PR	16-JUL-1999;	99US-0144086P.	PR	08-OCT-1999;	99US-0158232P.		
PR	19-JUL-1999;	99US-0144325P.	PR	12-OCT-1999;	99US-0158369P.		
PR	19-JUL-1999;	99US-0144321P.	PR	13-OCT-1999;	99US-0158293P.		
PR	19-JUL-1999;	99US-0144333P.	PR	13-OCT-1999;	99US-0158295P.		
PR	19-JUL-1999;	99US-0144334P.	PR	14-OCT-1999;	99US-0158329P.		
PR	19-JUL-1999;	99US-0144335P.	PR	14-OCT-1999;	99US-0158330P.		
PR	20-JUL-1999;	99US-0144322P.	PR	14-OCT-1999;	99US-0158331P.		
PR	20-JUL-1999;	99US-0144332P.	PR	14-OCT-1999;	99US-0158377P.		
PR	20-JUL-1999;	99US-0144333P.	PR	14-OCT-1999;	99US-0158388P.		
PR	21-JUL-1999;	99US-0145086P.	PR	18-OCT-1999;	99US-0158548P.		
PR	21-JUL-1999;	99US-0145088P.	PR	21-OCT-1999;	99US-0160741P.		
PR	22-JUL-1999;	99US-0145218P.	PR	21-OCT-1999;	99US-0167676P.		
PR	22-JUL-1999;	99US-0145224P.	PR	21-OCT-1999;	99US-0167678P.		
PR	22-JUL-1999;	99US-0145087P.	PR	21-OCT-1999;	99US-016770P.		
PR	22-JUL-1999;	99US-0145089P.	PR	21-OCT-1999;	99US-016814P.		
PR	23-JUL-1999;	99US-0145114P.	PR	25-OCT-1999;	99US-016815P.		
PR	23-JUL-1999;	99US-0145145P.	PR	25-OCT-1999;	99US-016816P.		
PR	23-JUL-1999;	99US-0145218P.	PR	26-OCT-1999;	99US-016818P.		
PR	23-JUL-1999;	99US-0145244P.	PR	26-OCT-1999;	99US-016816P.		
PR	26-JUL-1999;	99US-0145276P.	PR	26-OCT-1999;	99US-016817P.		
PR	27-JUL-1999;	99US-0145913P.	PR	28-OCT-1999;	99US-016819P.		
PR	27-JUL-1999;	99US-0145918P.	PR	28-OCT-1999;	99US-016820P.		
PR	03-AUG-1999;	99US-0145919P.	PR	28-OCT-1999;	99US-016822P.		
PR	04-AUG-1999;	99US-0147038P.	PR	28-OCT-1999;	99US-016893P.		
PR	04-AUG-1999;	99US-0147204P.	PR	29-OCT-1999;	99US-0167142P.		
PR	05-AUG-1999;	99US-0147260P.	PR	05-AUG-1999;	99US-0147260P.		
PR	06-AUG-1999;	99US-014730P.	PR	18-AUG-1999;	99US-0148116P.		
PR	09-AUG-1999;	99US-014793P.	PR	09-AUG-1999;	99US-0148116P.		
PR	09-AUG-1999;	99US-0147935P.	PR	10-AUG-1999;	99US-0148117P.		
PR	11-AUG-1999;	99US-0148119P.	PR	11-AUG-1999;	99US-0148119P.		
PR	12-AUG-1999;	99US-0148341P.	PR	12-AUG-1999;	99US-0148341P.		
PR	13-AUG-1999;	99US-0148565P.	PR	13-AUG-1999;	99US-0148565P.		
PR	13-AUG-1999;	99US-0148844P.	PR	13-AUG-1999;	99US-0148844P.		
PR	16-AUG-1999;	99US-01493368P.	PR	16-AUG-1999;	99US-01493368P.		

US-10-717-243-59 (1-28) x AAG04859 (1-356)  
25 AAAATGAAGTCTTGTGTTTACATGT 2  
Qy

Db 21.8 LybMetLysAlaCysPheThrCys 225

Search completed: February 17, 2006, 09:46:27  
Job time : 130 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: February 17, 2006, 09:51:15 (without alignments)

70.149 Million cell updates/sec  
Title: US-10-717-243-59

Perfect score: 53 (without alignments)

Sequence: 1 CACATGTAACAGACTCATTTGGC 28

Scoring table: BLOSUM62

Xgapext 0.0 , Xgapext 0.5

Ygapop 10.0 , Ygapext 0.5

Fgapop 6.0 , Fgapext 7.0

Delop 6.0 , Delext 7.0

Searched: 572060 seqs; 82275679 residues

Total number of hits satisfying chosen parameters: 1144120

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL:frame\_n2p model -DEV=xlp

-Q=/abs/US10717243/app\_query.fasta\_1

-DB=Issued Patents AA -QFTM=fascan -SUFFIXX=rai -MINMATCH=0.1 -LOGFCCL=0

-LOOPEXT=0 -UNITS=5nts -START=1 -END=-1 -MATRIX=blossum62 -TRANS=human40.cdi

-LIST=45 -DOCKING=proto -PCT=100 -THR MAX=0 -THR MIN=0 -ALIGN=15

-NODE=LOCAL -OUTfmt=proto -NORM=ext -HEAPSITE=500 -MINLEN=2000000000

-HOST=abs02p -USER=US10717243 -@CGN 1-1 71@runat 16022006 160654 2293 -NCPU=6

-CPU=3 -NO MMAP -NEG SCORES=0 -WAIT -DSTOPLOCK=100 -LONGLOG -DEV TIMEOUT=120

-WARN TIMEOUT=30 -THREADS=1 -XGPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7

-YGAPOP=10 -YGAPEXT=0.5 -DELEXT=7

Database : Issued Patents AA:  
1: /sgn2\_6/ptodata/1/iaa15/COMB.pep:\*

2: /sgn2\_6/ptodata/1/iaa6/COMB.pep:\*

3: /sgn2\_6/ptodata/1/iaaH/COMB.pep:\*

4: /sgn2\_6/ptodata/1/iaaPCtus COMB.pep:\*

5: /sgn2\_6/ptodata/1/iaaRE COMB.pep:\*

6: /sgn2\_6/ptodata/1/iaa/backfilets.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	53	100.0	251	1	US-08-425-336-108	Sequence 108, App
2	53	100.0	251	1	US-08-488-113B-108	Sequence 108, App
3	53	100.0	251	1	US-08-477-484B-108	Sequence 108, App
4	53	100.0	251	1	US-08-645-360-108	Sequence 108, App
5	53	100.0	251	2	US-08-839-765-108	Sequence 108, App
6	53	100.0	251	2	US-09-134-389-108	Sequence 108, App
7	53	100.0	251	2	US-09-610-838-108	Sequence 108, App
8	53	100.0	251	2	US-09-711-485-108	Sequence 108, App
9	43	81.1	251	1	US-07-901-707-2	Sequence 2, App
10	43	81.1	251	1	US-07-988-430-2	Sequence 2, App
11	43	81.1	251	1	US-08-425-336-2	Sequence 2, App
12	43	81.1	251	1	US-08-425-336-99	Sequence 99, App

### ALIGNMENTS

RESULT 1  
US-08-425-336-108  
Sequence 108, Application US/08425336  
Patent No. 5621083

GENERAL INFORMATION:

APPLICANT: Better, Marc D.

APPLICANT: Carroll, Stephen F.

APPLICANT: Stunika, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating

NUMBER OF SEQUENCES: 140

CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
STREET: 6300 Sears Tower, 233 South Wacker Drive  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/425,336

FILING DATE: 18-APR-1995

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/064,691

FILING DATE: 12-MAY-1993

APPLICATION NUMBER: 07/901,707

FILING DATE: 19-JUN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:

NAME: Meyers, Thomas C.  
 REGISTRATION NUMBER: P-36,989  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/474-6300  
 TELEX: 312/474-0448  
 TELEX: 25-3856  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-425-336-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) × US-08-425-336-108 (1-251)

Qy 2 ACATGTAACAAAGACTTCATTGGC 28  
 Y 2 ACATGTAACAAAGACTTCATTGGC 28  
 Db 102 ThrcysLystrArgLeuHisPheGly 110

RESULT 2  
 US-08-488-113B-108  
 Sequence 108, Application US/08488113B  
 Patent No. 5744580

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 CARROLL, Stephen F.  
 APPLICANT: Carroll, Stephen F.  
 STUDNIKA, Gary M.  
 APPLICANT: Studnika, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 169

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/488,113B  
 FILING DATE: 07-JUN-1995  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/425,336  
 FILING DATE: 18-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918

REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 110222US07/200-70.P3.C2A  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-488-113B-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) × US-08-488-113B-108 (1-251)

Qy 2 ACATGTAACAAAGACTTCATTGGC 28  
 Y 2 ACATGTAACAAAGACTTCATTGGC 28  
 Db 102 ThrcysLystrArgLeuHisPheGly 110

RESULT 3  
 US-08-477-484B-108  
 Sequence 108, Application US/08477484B  
 Patent No. 5756639

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 CARROLL, Stephen F.  
 APPLICANT: Carroll, Stephen F.  
 STUDNIKA, Gary M.  
 APPLICANT: Studnika, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 169

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/477,484B  
 FILING DATE: 07-JUN-1995  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/425,336  
 FILING DATE: 18-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918

REFERENCE/DOCKET NUMBER: 11022US07/200-70.P3.C2A  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-477-484B-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) × US-08-477-484B-108 (1-251)  
 Qy 2 ACATGTAACACAAGACTTCATTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110

RESULT 4  
 US-08-466-360-108  
 Sequence 108 Application 'US/08646360  
 Patent No. 5837491  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 TITLE OF INVENTION: Proteins  
 NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COUNTRY: USA

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 12-MAY-1996  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 200-70.P4

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-466-360-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) × US-08-646-360-108 (1-251)  
 Qy 2 ACATGTAACACAAGACTTCATTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110

RESULT 5  
 US-08-439-765-108  
 Sequence 108 Application 'US/08839765  
 Patent No. 6146631  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 TITLE OF INVENTION: Proteins  
 NUMBER OF SEQUENCES: 169  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COUNTRY: USA

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/839,765  
 FILING DATE: 15-APR-1997  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/839,765  
 FILING DATE: 18-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE DOCKET NUMBER: 11022US09/200-70.P3.C3  
 TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-839-765-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 9  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x US-08-839-765-108 (1-251)

Qy 2 ACATGTAACAAAGACTCATTTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110

---

**RESULT 6**  
 Sequence 108, Application US/09136389  
 Patent No. 6146850

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 TITLE OF INVENTION: Proteins  
 NUMBER OF SEQUENCES: 173

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/136,389  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/646,360  
 FILING DATE: 13-MAY-1996  
 PRIOR APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 200-70.P4

---

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-839-765-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x US-09-136-388-108 (1-251)

Qy 2 ACATGTAACAAAGACTCATTTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110

---

**RESULT 7**  
 Sequence 108, Application US/09136389  
 Patent No. 6376217

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 TITLE OF INVENTION: Proteins  
 NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/610,838  
 FILING DATE: 06-JUL-2000  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/09/136,389  
 FILING DATE: 18-AUG-1998  
 APPLICATION NUMBER: 08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 200-70.P4

NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: US-09-610-838-108  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEX: 312/707-9155  
 FAX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 1.08:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-09-610-838-108

Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 2 Gaps: 0  
 US-10-717-243-59 (1-28) x US-09-610-838-108 (1-251)  
 Qy 2 ACATGTAACAGACTCATTTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110

RESULT 8  
 US-09-711-485-108  
 Sequence 1.08, Application US/09711485

GENERAL INFORMATION:  
 Parent No: 6649742  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins  
 NUMBER OF SEQUENCES: 169  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/711,485  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/539,765  
 FILING DATE:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.

REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 11022US09/200-70.P3.C3  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEX: 312/707-9155  
 INFORMATION FOR SEQ ID NO: 1.08:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-09-711-485-108  
 Alignment Scores:  
 Pred. No.: 0.0135 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 2 Gaps: 0  
 US-10-717-243-59 (1-28) x US-09-711-485-108 (1-251)  
 Qy 2 ACATGTAACAGACTCATTTGGC 28  
 Db 102 ThrCysLysThrArgLeuHisPheGly 110  
 RESULT 9  
 US-07-901-707-2  
 Sequence 2, Application US/07901707  
 ;  
 ; Patent No. 5376546  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bernhard, Susan L.  
 ; APPLICANT: Better, Marc D.  
 ; APPLICANT: Carroll, Steve F.  
 ; APPLICANT: Lane, Julie A.  
 ; TITLE OF INVENTION: Materials Comprising and Methods of  
 ; Composition and Use for Ribosome-Inactivating Proteins  
 ; NUMBER OF SEQUENCES: 57  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &  
 ; ADDRESSEE: Bicknell  
 ; STREET: Two First National Plaza, 20 South Clark  
 ; CITY: Chicago  
 ; STATE: Illinois  
 ; COUNTRY: USA  
 ; ZIP: 60603  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC Compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/07/901,707  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/539,765  
 FILING DATE:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 35,302  
 REFERENCE/DOCKET NUMBER: 27129/30910  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (312) 346-5750  
 TELEX: (312) 984-5750  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: AMINO ACID

TOPOLGY: linear  
 MOLECULE TYPE: protein  
 US-07-901-707-2

Alignment Scores:  
 Pred. No.: 1.54 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservative: 88.9%  
 Best Local Similarity: 88.9% Query Match: 81.1%  
 Query Match: 81.1% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) x US-07-901-707-2 (1-251)

Qy 2 ACATGAAACAGACTTCAATTGGC 28  
 Db 102 ThrIleLysThrArgLeuHisPheGly 110

---

RESULT 10-988-430-2  
 Patent No. 5416202 Application US/07988430

GENERAL INFORMATION:  
 APPLICANT: Bernhard, Susan L.  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Lane, Julie A.  
 APPLICANT: Lei, Shau-Ping  
 TITLE OF INVENTION: Materials Comprising and Methods of Preparation and Use for Ribosome-Inactivating Proteins  
 NUMBER OF SEQUENCES: 101  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEES: Marshall, O'Toole, Gerstein, Murray & Borun  
 ADDRESSEES: Bicknell  
 STREET: Two First National Plaza, 20 South Clark  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60603

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 SOFTWARE: PC-DOS/MS-DOS  
 CURRENT APPLICATION DATA:  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US/07/988,430  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: No. 5416202 and, Greta E.  
 REGISTRATION NUMBER: 35302  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (312) 346-5750  
 TELEFAX: (312) 984-9740  
 TELEX: 25-3856  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: AMINO ACID  
 TOPOLGY: linear  
 MOLECULE TYPE: protein  
 US-07-988-430-2

Alignment Scores:  
 Pred. No.: 1.54 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservative: 88.9%  
 Best Local Similarity: 88.9% Query Match: 81.1%  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) x US-08-425-336-2 (1-251)

Qy 2 ACATGAAACAGACTCATTTGGC 28  
 Db 102 ThrIleYstThrArgLeuHisPheGly 110

RESULT 12  
 US-08-425-336-99  
 Sequence 99, Application US/08425336

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnika, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins  
 NUMBER OF SEQUENCES: 140  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
 STREET: 6300 Sears Tower, 233 South Wacker Drive  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60606-6402  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/425,336  
 FILING DATE: 18-APR-1995  
 CLASSIFICATION: 530  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US/08/425,336  
 FILING DATE: 18-APR-1995  
 CLASSIFICATION: 530  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Meyers, Thomas C.  
 REGISTRATION NUMBER: P-36,989  
 REFERENCE/DOCKET NUMBER: 31394  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/474-6300  
 TELEFAX: 312/474-0448  
 TELEX: 25-3856  
 INFORMATION FOR SEQ ID NO: 100:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 REFERENCE/DOCKET NUMBER: 31394  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/474-6300  
 TELEX: 25-3856  
 INFORMATION FOR SEQ ID NO: 99:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-425-336-99

Alignment Scores:  
 Pred. No.: 1.54 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservative: 0  
 Best Local Similarity: 88.9% Mismatches: 1  
 Query Match: 81.1% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) x US-08-425-336-100 (1-251)

Qy 2 ACATGAAACAGACTCATTTGGC 28  
 Db 102 ThrIleYstThrArgLeuHisPheGly 110

RESULT 13  
 US-08-425-336-100  
 Sequence 100, Application US/08425336  
 Patent No. 5621083

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
 STREET: 6300 Sears Tower, 233 South Wacker Drive  
 CITY: Chicago  
 STATE: Illinois

COUNTRY: USA  
 ZIP: 60606-6402

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/425,336

FILING DATE: 18-APR-1995

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/064,691

FILING DATE: 12-MAY-1993

APPLICATION NUMBER: US 07/901,707

FILING DATE: 19-JUN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:

NAME: Meyers, Thomas C.

REGISTRATION NUMBER: P-36,989

REFERENCE/DOCKET NUMBER: 31394

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/474-6300

TELEFAX: 312/474-0448

TELEX: 25-3856

TELEX: 312/474-0448

TELEX: 312/474-6300

TELEX: 25-3856

SEQUENCE CHARACTERISTICS:

LENGTH: 251 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-425-336-101

Alignment Scores:  
 Pred. No.: 1.01: Length: 251  
 Score: 43.00: Matches: 8  
 Percent Similarity: 88.9% Conservative: 0  
 Best Local Similarity: 88.9% Mismatches: 1  
 Query Match: 81.1% Indels: 0  
 DB: 1 Gaps: 0

US-10-717-243-59 (1-28) x US-08-425-336-102 (1-251)  
 Qy 2 ACATGTAACAAAGACTCATTTGGC 28  
 Db 102 ThrIleLysThrArgLeuHsPheGly 110  
 RESULT 15  
 US-08-425-336-102  
 Sequence 102, Application US/08425336  
 Patient No. 5621083  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 APPLICANT: Carroll, Stephen F.  
 APPLICANT: Studnicka, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 PROTEINS  
 NUMBER OF SEQUENCES: 140  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
 STREET: 6300 Sears Tower, 233 South Wacker Drive  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60606-6402  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk

Search completed: February 17, 2006, 09:53:33  
 Job time : 34 secs

1 nucelic - protein search, using frame\_plus\_n2p model  
 on on: February 17, 2006, 10:07:00 ; Search time 21.7 Seconds  
 (without alignments)  
 107.827 Million cell updates/sec

Line	Text			
12	43      81.1      251      4      US-10-127-890-106			
13	43      81.1      251      4      US-10-127-890-107			
14	43      81.1      251      4      US-10-127-890-109			
15	43      81.1      251      4      US-10-127-890-110			
16	43      81.1      251      4      US-10-127-890-111			
17	43      81.1      251      5      US-10-127-890-112			
18	43      81.1      251      5      US-10-127-890-113			
19	43      81.1      251      5      US-10-127-890-114			
20	43      81.1      251      5      US-10-127-890-115			
21	43      81.1      251      5      US-10-127-890-116			
22	43      81.1      251      5      US-10-127-890-117			
23	43      81.1      251      5      US-10-127-890-118			
24	43      81.1      251      5      US-10-127-890-119			
25	43      81.1      251      5      US-10-127-890-120			
26	43      81.1      251      5      US-10-127-890-121			
27	43      81.1      251      5      US-10-127-890-122			
28	43      81.1      251      5      US-10-127-890-123			
29	43      81.1      251      5      US-10-127-890-124			
30	43      81.1      251      5      US-10-127-890-125			
31	43      81.1      251      5      US-10-127-890-126			
32	43      81.1      251      5      US-10-127-890-127			
33	43      81.1      251      5      US-10-127-890-128			
34	43      81.1      251      5      US-10-127-890-129			
35	43      81.1      251      5      US-10-127-890-130			
36	43      81.1      251      5      US-10-127-890-131			
37	41      77.4      42      4      US-10-127-890-132			
C	38      40      75.5      42      4      US-10-127-890-133			
C	39      39      73.6      42      4      US-10-127-890-134			
C	40      39      73.6      42      4      US-10-127-890-135			
C	41      39      73.6      42      4      US-10-127-890-136			
C	42      39      73.6      42      4      US-10-127-890-137			
C	43      39      73.6      42      4      US-10-127-890-138			
C	44      39      73.6      42      4      US-10-127-890-139			
C	45      39      73.6      42      4      US-10-127-890-140			
				US-10-127-890-141
				US-10-127-890-142
				US-10-127-890-143
				US-10-127-890-144
				US-10-127-890-145
				US-10-127-890-146
				US-10-127-890-147
				US-10-127-890-148
				US-10-127-890-149
				US-10-127-890-150
				US-10-127-890-151
				US-10-127-890-152
				US-10-127-890-153

total number of hits satisfying chosen parameters: 3735138

minimum DB seq length: 0  
 maximum DB seq length: 2000000000

post-processing: Minimum Match 0%  
                   Maximum Match 100%

Listing First 45 summaries

command line parameters:  
 MODEL=frame+ n2p model -DEV=x10  
 =/abs/ABSSWEB\_spool/US101723/runat\_16022006\_160702/app\_query.fasta\_1  
 =/OPB\_PUBLISHED\_Applications\_AA\_Main -QFMTR=rastan -MFMTR=rapbm  
 -UNITS=G-bits -START=1 -END=1 -MATRIX=blobum62  
 TRANS=human0.cdi -LOOPEL=0 -UNITS=G-bits -LIST=45 -DOCLIGN=200  
 THR\_SCORE=pct THR\_MAX=100  
 THR\_MIN=0 -ALIGN=15 -MODE=8802P  
 USER=US1017243 @CGN\_1\_307 @runat\_16022006\_160702\_2473 -NCPU=6  
 -ICPU=3  
 NO MMAP -NEGP SCORES=0 -WAIT -DBLOCK=100 -LONGLOG -DEV TIMEOUT=120  
 -WARN TIMEOUT=30 -THREADS=1 -XGPOP=0.5 -XGAPEXT=7  
 -YGAPOP=10 -DELOP=6 -DELEXT=7

database : Published\_Applications\_AA\_Main:  
 1: /cgn2\_6\_ptodata/1/pubbaa/US07\_PUBCOMB.pep\*  
 2: /cgn2\_6\_ptodata/1/pubbaa/US08\_PUBCOMB.pep\*  
 3: /cgn2\_6\_ptodata/1/pubbaa/US09\_PUBCOMB.pep\*  
 4: /cgn2\_6\_ptodata/1/pubbaa/US10A\_PUBCOMB.pep\*  
 5: /cgn2\_6\_ptodata/1/pubbaa/US11\_PUBCOMB.pep\*  
 6: /cgn2\_6\_ptodata/1/pubbaa/US11\_PUBCOMB.pep\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	53	100.0	251	4      US-10-127-890-108
2	53	100.0	251	5      US-10-127-890-109
3	43	81.1	251	3      US-09-765-527-247
4	43	81.1	251	4      US-10-127-890-2
5	43	81.1	251	4      US-10-127-890-3
6	43	81.1	251	4      US-10-127-890-100
7	43	81.1	251	4      US-10-127-890-101
8	43	81.1	251	4      US-10-127-890-102
9	43	81.1	251	4      US-10-127-890-103
10	43	81.1	251	4      US-10-127-890-104
11	43	81.1	251	4      US-10-127-890-105

Sequence 106, APP  
 Sequence 107, APP  
 Sequence 109, APP  
 Sequence 110, APP  
 Sequence 111, APP  
 Sequence 2, APP1  
 Sequence 99, APP1  
 Sequence 100, APP  
 Sequence 101, APP  
 Sequence 102, APP  
 Sequence 103, APP  
 Sequence 104, APP  
 Sequence 99, APP1  
 Sequence 106, APP  
 Sequence 107, APP  
 Sequence 108, APP  
 Sequence 109, APP  
 Sequence 110, APP  
 Sequence 111, APP  
 Sequence 259, APP  
 Sequence 253, APP  
 Sequence 1, APP1  
 Sequence 251, APP  
 Sequence 13, APP1  
 Sequence 26, APP1  
 Sequence 186810,  
 Sequence 12893,  
 Sequence 4551, AP  
 Sequence 44, APP1  
 Sequence 1664, AP  
 Sequence 939, APP  
 Sequence 528,  
 Sequence 646, APP  
 Sequence 5553, AP

ALIGNMENTS

RESULT 1  
 US-10-127-890-108  
 ; Sequence 108, Application US10127890  
 ; Publication No. US2003016194A1  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 Carroll, Stephen F.  
 Studnitska, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 PROTEINS  
 NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 CURRENT APPLICATION DATA:  
 PRIORITY APPLICATION NUMBER: US/10/127-890  
 APPLICATION NUMBER: US/10/127-890  
 FILING DATE: 23-Apr-2002  
 CLASSIFICATION: <Unknown>  
 PRIORITY APPLICATION NUMBER: US/08/646-360  
 APPLICATION NUMBER: US/08/646-360  
 FILING DATE: 13-MAY-1996-1996  
 APPLICATION NUMBER: PCT/US94/05248  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 10-MAY-1994  
 APPLICATION NUMBER: US 08/988,430  
 FILING DATE: 10-MAY-1994

FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 11022US09/200-70.P3.C3  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-8889  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 108:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: Linear  
 MOLECULE TYPE: Protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 108:  
 US-10-127-890-108

Alignment Scores:  
 Pred. No.: 0.22 Length: 251  
 Score: 53.00 Matches: 9  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 100.0% Indels: 0  
 DB: 4 Gaps: 0

US-10-717-243-59 (1-28) x US-10-717-243-108 (1-251)

Qy 2 ACATGTTAAACAAAGCTTCAATTGTC 28  
 Db 102 ThrcysLysThrArgLeuHsPheGly 110

RESULT 3  
 US-09-765-527-247  
 Sequence 247, Application US/09765527  
 Patent No. US2003006638A1  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 TITLE OF INVENTION: Methods for Recombinant Microbial Production of  
 Correspondence Address:  
 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
 NUMBER OF SEQUENCES: 265  
 STREET: 6300 Sears Tower, 233 South Wacker Drive  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: United States of America  
 ZIP: 60605-6402  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.2.5  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/765,527  
 FILING DATE: 18-Jan-2001  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 08/621,803  
 FILING DATE: <Unknown>  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Borun, Michael F.  
 REGISTRATION NUMBER: 25,447  
 REFERENCE/DOCKET NUMBER: 27129/33199  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/474-6300  
 TELEX: 312/474-0448  
 INFORMATION FOR SEQ ID NO: 247:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid

RESULT 2  
 US-10-717-243-108  
 Sequence 108, Application US/10717243  
 Publication No. US2005054835A1  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 Carroll, Stephen F.  
 Etudnika, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating  
 Proteins  
 CORRESPONDENCE ADDRESS:  
 ADDRESSE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.2.5  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/717,243  
 FILING DATE: 18-Nov-2003  
 CLASSIFICATION: 530  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US/08/839,765  
 FILING DATE: 15-APR-1997  
 APPLICATION NUMBER: US 08/425,336  
 FILING DATE: 18-APR-1995  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US 07/901,707

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-10-127-890-2

Alignment Scores:

Pred. No.:	18.5	Length:	251
Score:	43.00	Matches:	8
Percent Similarity:	88.9%	Conservative:	0
Best Local Similarity:	88.9%	Mismatches:	1
Query Match:	81.1%	Indels:	0
DB:	3	Gaps:	0

US-10-717-243-59 (1-28) × US-10-127-890-2 (1-251)

Qy 2 ACATGTAACAGACTCATTTGGC 28

Db 102 ThrIleLysThrArgLeuHisPheGly 110

RESULT 5

US-10-127-890-99

; Sequence 99, Application US/10127890

; Publication No. US20030166196A1

GENERAL INFORMATION:

APPLICANT: Better, Marc D.

Carroll, Stephen F.

Studnitska, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173

CORRESPONDENCE ADDRESS:

ADDRESSEE: McAndrews, Held & Malloy, Ltd.

STREET: 500 West Madison Street, 34th floor

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60661

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/127,890

FILING DATE: 23-Apr-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/646,360

FILING DATE: 13-MAY-1996

APPLICATION NUMBER: PCT/US94/05348

FILING DATE: 12-MAY-1994

APPLICATION NUMBER: US 08/064,691

FILING DATE: 12-MAY-1993

APPLICATION NUMBER: US 07/988,430

FILING DATE: 09-DEC-1992

APPLICATION NUMBER: US 07/901,707

FILING DATE: 19-JUN-1992

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:

NAME: McNicholas, Janet M.

REGISTRATION NUMBER: 32,918

REFERENCE/DOCKET NUMBER: 200-70.P4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/707-8889

TELEFAX: 312/707-9155

TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 251 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 99:

US-10-127-890-99

Alignment Scores:  
 Pred. No.: 18.5 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservativeness: 0  
 Best Local Similarity: 88.9% Mismatches: 1  
 Query Match: 81.1% Deletions: 0  
 DBs: 0 Gaps: 0

US-10-717-243-59 (1-28) x US-10-127-890-99 (1-251)

Qy 2 ACATGAAACAGATTCAATTGGC 28  
 Db 102 ThrIleLystrArgLeuHsPheGly 110

---

RESULT 6 US-10-127-890-100  
 Sequence 100, Application US/10127890  
 Publication No. US20030166196A1  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 CARROLL, Stephen F.  
 STUDNIKA, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/127,890  
 FILING DATE: 23-APR-2002  
 CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US/08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US/07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US/07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US/07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 TELECOMMUNICATION INFORMATION:  
 DOCKET NUMBER: 200-70.P4  
 TELEPHONE: 11/707-8889  
 TELEX: 650 388-1248  
 INFORMATION FOR SEQ ID NO: 100:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 100:  
 US-10-127-890-100

Alignment Scores:  
 Pred. No.: 18.5 Length: 251  
 Score: 43.00 Matches: 8

Percent Similarity: 88.9%      Conservative: 0  
 Best Local Similarity: 88.9%      Mismatches: 1  
 Query Match: 81.1%      Indels: 0  
 DB: 4      Gaps: 0

US-10-717-243-59 (1-28) x US-10-127-890-101 (1-251)

Qy 2 ACATGTAACAGACTCATTTGGC 28  
 Db 102 ThrIleLysThrArgLeuHisPheGly 110

RESULT 9  
 US-10-127-890-103  
 Sequence 103, Application US/10127890  
 Publication No. US20030166196A1

GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 CARROLL, Stephen F.  
 STUDNIKA, Gary M.

TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173

CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/127,890  
 FILING DATE: 23-Apr-2002  
 CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 200-70.P4

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 102:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear

MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 102:  
 US-10-127-890-102

Alignment Scores:  
 Pred. No.: 18.5      Length: 251  
 Score: 43.00      Matches: 8  
 Percent Similarity: 88.9%      Conservative: 0  
 Best Local Similarity: 88.9%      Mismatches: 1  
 Query Match: 81.1%      Indels: 0  
 DB: 4      Gaps: 0

US-10-717-243-59 (1-28) x US-10-127-890-103 (1-251)

Qy 2 ACATGTAAGAACGACTTCATTTTGGC 28  
Db 102 ThrIleLySThrArgLeuHsPheGly 110

RESULT 10  
US-10-127-890-104  
Sequence 104, Application US/10127890  
Publication No. US20030166196A1  
GENERAL INFORMATION:  
APPLICANT: Better, Marc D.  
Carroll, Stephen F.  
Studnitska, Gary M.  
TITLE OF INVENTION: Immunotoxins Comprising  
Proteins  
NUMBER OF SEQUENCES: 173  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: McAndrews, Held & Malloy,  
STREET: 500 West Madison Street, 34th  
CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60661  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Vers  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/127,890  
FILING DATE: 23-Apr-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/646,360  
FILING DATE: 13-MAY-1996  
APPLICATION NUMBER: PCT/US94/05348  
FILING DATE: 12-MAY-1994  
APPLICATION NUMBER: US/08/064,691  
FILING DATE: 12-MAY-1993  
APPLICATION NUMBER: US/07/988,430  
FILING DATE: 09-DEC-1992  
APPLICATION NUMBER: US/07/901,707  
FILING DATE: 19-JUN-1992  
APPLICATION NUMBER: US/07/787,567  
FILING DATE: 04-NOV-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: McNicholas, Janet M.  
REGISTRATION NUMBER: 32,918  
REFERENCE/DOCKET NUMBER: 200-70-P4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 312/707-8889  
TELEFAX: 312/707-9155  
INFORMATION FOR SEQ ID NO: 104:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 251 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 104:  
US-10-127-890-104

Alignment Scores:  
Pred. No.: 18.5 Length:  
Score: 43.00 Matches:  
Percent Similarity: 88.9% Conservative:  
Best Local Similarity: 88.9% MisMatches:  
Query Match: 81.1% Indels:  
DB: 4 Gaps:

US-10-717-243-59 (1-28) x US-10-127-890-104 (1-251)

RESULT 11  
 US-10-127-890-105  
 Sequence 105, Application US/10127890  
 Publication No.: US2003016619A1  
 GENERAL INFORMATION:  
 APPLICANT: Better, Marc D.  
 Carroll, Stephen F.  
 SCUDNICKA, Gary M.  
 TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins  
 NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 COUNTRY: USA  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patentin Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/127,890  
 FILING DATE: 23-Apr-2002  
 CLASSIFICATION: <Unknown>  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US/08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US/07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US/07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US/07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE/DOCKET NUMBER: 200-70-P4  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEX: 312/707-9155  
 INFORMATION FOR SEQ ID NO: 105:  
 LENGTH: 251 amino acids  
 SEQUENCE CHARACTERISTICS:  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 105:  
 US-10-127-890-105  
 Alignment Scores:  
 Fred. No.: 18.5 Length: 251  
 Score: 43.0 Matches: 8  
 Percent Similarity: 89.9% Conservative: 1  
 Best Local Similarity: 88.9% Mismatches: 0  
 Query Match: 81.1% Indels: 0  
 DB: 4 Gaps: 0  
 2 ACATGTAAACAGACTCATTTGGC 28  
 Db 102 ThrileysthAргLeuHisPheGly 110  
 2 ACATGTAAACAGACTCATTTGGC 28  
 Qy 110 (1-28) x US-10-127-890-105 (1-251)

Db 102 ThrileysThrArgleuHisPheGly 110

RESULT 12  
US-10-127-890-106

; Sequence 106, Application US/10127890  
; Publication No. US20030166196A1

; GENERAL INFORMATION:  
; APPLICANT: Better, Marc D.  
; Carroll, Stephen F.

; TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: McAndrews, Held & Malloy, Ltd.

STREET: 500 West Madison Street, 34th floor  
CITY: Chicago  
STATE: Illinois

COUNTRY: USA  
ZIP: 60661

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/127,890

FILING DATE: 23-Apr-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/646,360

FILING DATE: 13-MAY-1996

APPLICATION NUMBER: PCT/US94/05348

FILING DATE: 12-MAY-1994

APPLICATION NUMBER: US 08/064,691

FILING DATE: 12-MAY-1993

APPLICATION NUMBER: US 07/988,430

FILING DATE: 09-DEC-1992

APPLICATION NUMBER: US 07/901,707

FILING DATE: 19-JUN-1992

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:

NAME: McNicholas, Janet M.

REGISTRATION NUMBER: 32,918

REFERENCE/DOCKET NUMBER: 200-70-P4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/707-8889

TELEFAX: 312/707-9155

TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 106:

SEQUENCE CHARACTERISTICS:

LENGTH: 251 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 106:

US-10-127-890-106

SEQUENCE DESCRIPTION: SEQ ID NO: 106:

RESULT 13  
US-10-127-890-107

; Sequence 107, Application US/10127890  
; Publication No. US20030166196A1

; GENERAL INFORMATION:  
; APPLICANT: Better, Marc D.  
; Carroll, Stephen F.

; TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173

CORRESPONDENCE ADDRESS:  
ADDRESSEE: McAndrews, Held & Malloy, Ltd.

STREET: 500 West Madison Street, 34th floor  
CITY: Chicago  
STATE: Illinois

COUNTRY: USA  
ZIP: 60661

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/127,890

FILING DATE: 23-Apr-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/646,360

FILING DATE: 13-MAY-1996

APPLICATION NUMBER: PCT/US94/05348

FILING DATE: 12-MAY-1994

APPLICATION NUMBER: US 08/064,691

FILING DATE: 12-MAY-1993

APPLICATION NUMBER: US 07/988,430

FILING DATE: 09-DEC-1992

APPLICATION NUMBER: US 07/901,707

FILING DATE: 19-JUN-1992

APPLICATION NUMBER: US 07/787,567

FILING DATE: 04-NOV-1991

ATTORNEY/AGENT INFORMATION:

NAME: McNicholas, Janet M.

REGISTRATION NUMBER: 32,918

REFERENCE/DOCKET NUMBER: 200-70-P4

TELECOMMUNICATION INFORMATION:

TELEPHONE: 312/707-8889

TELEFAX: 312/707-9155

TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 107:

SEQUENCE CHARACTERISTICS:

LENGTH: 251 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 107:

US-10-127-890-107

SEQUENCE DESCRIPTION: SEQ ID NO: 107:

US-10-127-890-106

SEQUENCE DESCRIPTION: SEQ ID NO: 106:

US-10-1

US-10-127-890-109  
 / Sequence 109, Application US/10127890  
 / Publication No. US/030166196A1  
 / GENERAL INFORMATION:  
 / APPLICANT: Better, Marc D.  
 / Carroll, Stephen F.  
 / Studnika, Gary M.  
 / TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins

NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC Compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/127,890  
 FILING DATE: 23-Apr-2002  
 CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US 08/064,691  
 FILING DATE: 12-MAY-1993  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.

REGISTRATION NUMBER: 32,918  
 REFERENCE DOCKET NUMBER: 200-70.P4

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 109:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear

MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 109:  
 US-10-127-890-109

Alignment Scores:  
 Pred. No.: 18.5 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservative: 0  
 Best Local Similarity: 88.9% Mismatches: 1  
 Query Match: 81.1% Indels: 0  
 DB: 4 Gaps: 0

US-10-717-243-59 (1-28) x US-10-127-890-110 (1-251)  
 Qy 2 ACATGAAACAGAGACTTCATTGGC 28  
 Db 102 ThrIleSthrArgLeuHsPheGly 110

RESULT 15  
 US-10-127-890-110, Application US/10127890

Publication No. US20030166196A1  
 / GENERAL INFORMATION:  
 / APPLICANT: Better, Marc D.  
 / Carroll, Stephen F.  
 / Studnika, Gary M.  
 / TITLE OF INVENTION: Immunotoxins Comprising Ribosome-Inactivating Proteins  
 NUMBER OF SEQUENCES: 173  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: McAndrews, Held & Malloy, Ltd.  
 STREET: 500 West Madison Street, 34th floor  
 CITY: Chicago  
 STATE: Illinois  
 ZIP: 60661  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/127,890  
 FILING DATE: 23-Apr-2002  
 CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/646,360  
 FILING DATE: 13-MAY-1996  
 APPLICATION NUMBER: PCT/US94/05348  
 FILING DATE: 12-MAY-1994  
 APPLICATION NUMBER: US 07/988,430  
 FILING DATE: 09-DEC-1992  
 APPLICATION NUMBER: US 07/901,707  
 FILING DATE: 19-JUN-1992  
 APPLICATION NUMBER: US 07/787,567  
 FILING DATE: 04-NOV-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: McNicholas, Janet M.  
 REGISTRATION NUMBER: 32,918  
 REFERENCE DOCKET NUMBER: 200-70.P4

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 312/707-8889  
 TELEFAX: 312/707-9155  
 TELEX: 650 388-1248

INFORMATION FOR SEQ ID NO: 110:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 251 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear

MOLECULE TYPE: protein  
 SEQUENCE DESCRIPTION: SEQ ID NO: 110:  
 US-10-127-890-110

Alignment Scores:  
 Pred. No.: 18.5 Length: 251  
 Score: 43.00 Matches: 8  
 Percent Similarity: 88.9% Conservative: 0  
 Best Local Similarity: 88.9% Mismatches: 1  
 Query Match: 81.1% Indels: 0  
 DB: 4 Gaps: 0

US-10-717-243-59 (1-28) x US-10-127-890-110 (1-251)  
 Qy 2 ACATGAAACAGAGACTTCATTGGC 28  
 Db 102 ThrIleSthrArgLeuHsPheGly 110

Search completed: February 17, 2006, 10:11:14  
 Job time : 108.5 secs

Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: February 17, 2006, 10:07:45 ; Search time 2.2 Seconds  
(without alignments)

36.183 Million cell updates/sec

Title: US-10-717-243-59

Perfect score: 53

Sequence: 1 CACATGTTAAACAAAGACTTCATTGGC 28

Scoring table: BLOSUM62

Xgapext	10.0	Xgapext	0.5
Ygapext	10.0	Ygapext	0.5
Fgapext	6.0	Fgapext	7.0
Delop	6.0	Delext	7.0

Searched: 107819 seqs., 14214640 residues

Total number of hits satisfying chosen parameters: 215638

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Maximum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

```

-MODEL:frame+np2.model -DEV=xlp
-Q=/abs/ABSWEB/spool/US107243/runat_16022006_160704_2530/app_query.fasta_1
-DB=Published Applications AA New -QFMT=fastaa -SUFFIX=rapbn -MINMATCH=0.1
-LOPCL=-LOPEXT=0 UNITS=bites -START=1 -END=-1 -MATRIX=blosum2
-TRANS=human40.col -LIST=45 -DOALIGN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFORMAT=sto -HEARSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -HOST=abs802p
-Q=/abs/ABSWEB/spool/US107243 @CGN 1..7 @runat_16022006_160704_2530/app_query.fasta_1
-NO MMAP -NG SCORES=0 -WAIT=0 -DSBLOCK=100 -LONGLOG -DEV TIMEOUT=120
-WARN TIMEOUT=30 THREADS=1 -XGAPPOP=10 -XGAPEXT=0.5
-YGAPOP=10 -YGAPEXT=0.5 -DELEXT=7

```

Database : Published\_Applications\_AA\_New:\*

```

1: /cgn2_6/pctodata/1/pubpaas/US08 NEW PUB.PEP:*
2: /cgn2_6/pctodata/1/pubpaas/US06 NEW PUB.PEP:*
3: /cgn2_6/pctodata/1/pubpaas/US07 NEW PUB.PEP:*
4: /cgn2_6/pctodata/1/pubpaas/US05 NEW PUB.PEP:*
5: /cgn2_6/pctodata/1/pubpaas/US10 NEW PUB.PEP:*
6: /cgn2_6/pctodata/1/pubpaas/US60 NEW PUB.PEP:*
7: /cgn2_6/pctodata/1/pubpaas/US11 NEW PUB.PEP:*
8: /cgn2_6/pctodata/1/pubpaas/US60 NEW PUB.PEP:*

```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query ID	Match Length	DB ID	Description
1	36	67.9	13	7	US-11-116-144-68
c	2	67.9	445	7	US-11-098-686-11367
c	3	35	66.0	472	6
c	4	34	64.2	326	7
c	5	34	64.2	326	7
c	6	34	64.2	608	7
c	7	33	62.3	187	6
c	8	33	62.3	522	6
c	9	33	62.3	636	7

Sequence 10347, A  
Sequence 76, APP1  
Sequence 60, APP  
Sequence 1372, APP  
Sequence 61, APP1  
Sequence 3294, APP  
Sequence 6782, APP  
Sequence 80, APP1  
Sequence 82, APP1  
Sequence 442, APP  
Sequence 193, APP1  
Sequence 22, APP1  
Sequence 34, APP1  
Sequence 82, APP1  
Sequence 442, APP  
Sequence 193, APP1  
Sequence 22, APP1  
Sequence 187, APP  
Sequence 188, APP  
Sequence 189, APP  
Sequence 32, APP1  
Sequence 631, APP1  
Sequence 20, APP1  
Sequence 11394, APP1  
Sequence 22, APP1  
Sequence 198, APP  
Sequence 576, APP  
Sequence 192, 5  
Sequence 35, APP1  
Sequence 32, APP1  
Sequence 36, APP1  
Sequence 37, APP1  
Sequence 38, APP1  
Sequence 39, APP1  
Sequence 40, APP1  
Sequence 41, APP1  
Sequence 42, APP1  
Sequence 43, APP1  
Sequence 44, APP1  
Sequence 45, APP1  
Sequence 46, APP1  
Sequence 47, APP1  
Sequence 48, APP1

ALIGMENTS

RESULT 1

US-11-116-144-68

; Sequence 68, Application US/11161644  
; Publication No. US2005027718A1

; GENERAL INFORMATION:

/ APPLICANT: BERTHET, FRANCOIS XAVIER  
/ APPLICANT: CASADBAU, FRANCESC VAYREDA  
/ APPLICANT: SANZ MARIA, MARIA CRUZ  
/ APPLICANT: GARCIA, TERESA LLOP  
/ APPLICANT: OLLÉ, ANGELS MOR

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING PATHOGEN

; TITLE OF INVENTION: INFECTON

; FILE REFERENCE: INL-084

; CURRENT APPLICATION NUMBER: US/11/116,144

; CURRENT FILING DATE: 2005-04-27

; PRIOR APPLICATION NUMBER: PCT/ES04/000581

; PRIOR FILING DATE: 2004-12-23

; NUMBER OF SEQ ID NOS: 301

; SOFTWARE: Patentin Ver. 3.3

; SEQ ID NO: 68

; LENGTH: 13

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-11-116-144-68

; Alignment Scores:  
Pred. No.: 7.64  
Score: 36.00  
Percent Similarity: 75.0%  
Best Local Similarity: 75.0%  
Query Match: 67.9%

Length: 13  
Matches: 6  
Conservative: 0  
Mismatchs: 0  
Indels: 0

DB: 7 Gaps: 0 Pred. No.: 10.7 Length: 472  
 US-10-717-243-59 (1-28) x US-11-115-144-68 (1-13) Score: 35.00 Matches: 6  
 Qy 5 TGTAAACAGACTTCATTTRGGC 28 Percent Similarity: 100.0% Conservative: 1  
 DB 1 CysLyserHisProHisPheGly 8 Best Local Similarity: 85.7% Mismatches: 0  
 DB: 6 Indels: 0 Gaps: 0

**RESULT 2**  
 US-11-098-686-11367  
 ; Sequence 11367, Application US/11098686  
 ; GENERAL INFORMATION:  
 ; FILE REFERENCE: US20050266423A1  
 ; CURRENT APPLICATION NUMBER: US/11/098, 686  
 ; CURRENT FILING DATE: 2005-04-04  
 ; PRIOR APPLICATION NUMBER: PCT/US03/31318  
 ; PRIOR FILING DATE: 2003-10-01  
 ; PRIOR APPLICATION NUMBER: US 60/416,395  
 ; PRIOR FILING DATE: 2002-10-04  
 ; NUMBER OF SEQ ID NOS: 11433  
 ; SOFTWARE: FastSEQ for Windows Version 4.0  
 ; SEQ ID NO: 11367  
 ; LENGTH: 445  
 ; TYPE: PRT  
 ; ORGANISM: Lawsonia intracellularis  
 US-11-098-686-11367 Alignment Scores:  
 Pred. No.: 6.66 Length: 445  
 Score: 36.00 Matches: 6  
 Percent Similarity: 85.7% Conservative: 0  
 Best Local Similarity: 85.7% Mismatches: 1  
 Query Match: 67.9% Indels: 0  
 DB: 7 Gaps: 0

US-10-717-243-59 (1-28) x US-11-098-686-11367 (1-445)  
 Qy 22 ATGAACTCTTGTATCATGT 2 Length: 445  
 Db 316 MetGlySerCysPheThrCys 322 Matches: 6  
 DB: 0

**RESULT 3**  
 US-10-689-742-68  
 ; Sequence 68, Application US/10689742  
 ; GENERAL INFORMATION:  
 ; FILE REFERENCE: 00766\_000091\_10  
 ; CURRENT APPLICATION NUMBER: US/10/689, 742  
 ; CURRENT FILING DATE: 2003-10-22  
 ; PRIOR APPLICATION NUMBER: 09/746,783  
 ; PRIOR FILING DATE: 2000-12-21  
 ; SOFTWARE: PatentIn version 3.2  
 ; SEQ ID NO: 68 Length: 326  
 ; LENGTH: 472  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-11-000-463-382

Alignment Scores:  
 Pred. No.: 17.6 Length: 326  
 Score: 34.00 Matches: 5  
 Percent Similarity: 77.0% Conservative: 2  
 Best Local Similarity: 55.6% Mismatches: 2  
 Query Match: 64.2% Indels: 0  
 DB: 7 Gaps: 0

**RESULT 5**  
 US-11-000-463-854  
 ; Sequence 854, Application US/11000463  
 ; Publication No. US20050266423A1

GENERAL INFORMATION  
 APPLICANT: Tang, Y Tom  
 APPLICANT: Liu, Chenghua  
 APPLICANT: Asundi, Vinod  
 APPLICANT: Chen, Rui-hong  
 APPLICANT: Qian, Xiaohong B.  
 APPLICANT: Wang, Zhiwei  
 APPLICANT: Wehrman, Tom  
 APPLICANT: Zhang, Jie  
 APPLICANT: Zhou, Bing  
 APPLICANT: Cao, Yi-Cheng  
 APPLICANT: Drmanac, Radoje T.  
 TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides  
 FILE REFERENCE: 785C1P4CN  
 CURRENT APPLICATION NUMBER: US/11/000,463  
 CURRENT FILING DATE: 2004-11-29  
 PRIOR APPLICATION NUMBER: 10/291,265  
 PRIOR FILING DATE: 2002-11-08  
 PRIOR APPLICATION NUMBER: PCT/US01/02623  
 PRIOR FILING DATE: 2001-01-25  
 PRIOR APPLICATION NUMBER: 09/922,279  
 PRIOR FILING DATE: 2001-08-03  
 PRIOR APPLICATION NUMBER: 09/491,404  
 PRIOR FILING DATE: 2000-01-25  
 PRIOR APPLICATION NUMBER: 09/617,746  
 PRIOR FILING DATE: 2000-07-17  
 PRIOR APPLICATION NUMBER: 09/631,451  
 PRIOR FILING DATE: 2000-08-03  
 PRIOR APPLICATION NUMBER: 09/633,870  
 PRIOR FILING DATE: 2000-09-15  
 NUMBER OF SEQ ID NOS: 944  
 SOFTWARE: Fast-SEQ for Windows Version 3.0  
 SEQ ID NO: 954  
 LENGTH: 326  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-11-000-453-854

Alignment Scores:  
 Pred. No.: 17.6 Length: 326  
 Score: 34.00 Matches: 5  
 Percent Similarity: 77.8% Conservative: 2  
 Best Local Similarity: 55.6% Mismatches: 2  
 Query Match: 64.2% Indels: 0  
 DB: 7 Gaps: 0

US-10-717-243-59 (1-28) × US-11-024-959-315 (1-608)

Qy 1 CACATGAAACAGACTCATTTGG 27  
 Db 264 HisLeuHsAsnYstGlyTrpTrp 272

RESULT 6  
 US-11-024-959-315  
 Sequence 315, Application US/11024959  
 GENERAL INFORMATION: CONNETT, RICHARD L.  
 APPLICANT: CONNETT, MARIE B.  
 APPLICANT: EMERSON, SARAH JANE  
 APPLICANT: GRIGOR, MURRAY ROBERT  
 APPLICANT: HIGGINS, COLEEN M.  
 APPLICANT: LIJND, STEVEN TROY  
 APPLICANT: MAGUSIN, ANDREAS  
 APPLICANT: KODRZYCKI, BOB  
 TITLE OF INVENTION: CELL CYCLE GENES AND RELATED METHODS  
 FILE REFERENCE: 04463-0360  
 CURRENT APPLICATION NUMBER: US/11/024,959  
 CURRENT FILING DATE: 2004-12-30  
 PRIOR APPLICATION NUMBER: 60/533,036  
 PRIOR FILING DATE: 2003-12-30  
 NUMBER OF SEQ ID NOS: 782  
 SOFTWARE: PatentIn version 3.3

Qy 28 GCCAAATGAGTCGTGTTAACAT 2  
 Db 337 AlaLyGlyLyGlycBPhelysCys 345

RESULT 7  
 US-10-980-388-65  
 Sequence 65, Application US/10980388  
 Publication No. US20050255490A1  
 GENERAL INFORMATION:  
 / APPLICANT: Paredi, Luis A.  
 / APPLICANT: Vogeli, Gabriel  
 / APPLICANT: Parodi, Luis A.  
 / APPLICANT: Hiebsch, Ronald R.  
 / APPLICANT: Lind, Peter  
 / APPLICANT: Kaytes, Paul S.  
 / APPLICANT: Ruff, Valerie  
 / APPLICANT: Huff, Rita M.  
 / APPLICANT: Wood, Linda S.  
 / TITLE OF INVENTION: Novel G Protein-Coupled Receptors Cross-Reference To Related App.  
 / FILE REFERENCE: 00325-US1  
 / CURRENT APPLICATION NUMBER: US/10/980,388  
 / CURRENT FILING DATE: 2004-11-02  
 / PRIOR APPLICATION NUMBER: US/09/791,932  
 / PRIOR FILING DATE: 2001-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,305  
 / PRIOR FILING DATE: 2000-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,304  
 / PRIOR FILING DATE: 2000-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,303  
 / PRIOR FILING DATE: 2000-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,397  
 / PRIOR FILING DATE: 2000-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,397  
 / PRIOR FILING DATE: 2000-02-23  
 / PRIOR APPLICATION NUMBER: 60/184,880  
 / PRIOR FILING DATE: 2000-03-13  
 / PRIOR APPLICATION NUMBER: 60/217,369  
 / PRIOR FILING DATE: 2000-07-11  
 / PRIOR APPLICATION NUMBER: 60/217,370  
 / PRIOR FILING DATE: 2000-07-11  
 / PRIOR APPLICATION NUMBER: 60/218,492  
 / PRIOR FILING DATE: 2000-07-20  
 / Remaining Prior Application data removed - See File Wrapper or PAM.  
 / SOFTWARE: PatentIn version 3.0  
 / SEQ ID NO: 65  
 / LENGTH: 187  
 / "TYPE": PRT  
 / ORGANISM: Homo sapiens  
 / US-10-980-388-65

Alignment Scores:  
 Pred. No.: 29 Length: 187  
 Score: 33.00 Matches: 5  
 Percent Similarity: 100.0% Conservative: 0  
 Best Local Similarity: 100.0% Mismatches: 0  
 Query Match: 62.3% Indels: 0  
 DB: 6 Gaps: 0

US-10-717-243-59 (1-28) x US-10-980-388-65 (1-187)

Qy 16 TCTTGTTCATACATGT 2  
Db 129 SerCysPheThrCys 133

**RESULT 8**  
US-10-519-390-21  
Sequence 21, Application US/10519390  
Publication No. US20060008872A1  
GENERAL INFORMATION:  
APPLICANT: MEDEXGEN, Inc.  
APPLICANT: LEE, Ha-k-sup  
APPLICANT: YI, Ki-Wan  
APPLICANT: KIM, Jae-Youn  
APPLICANT: HEO, Youn-Hwa  
TITLE OF INVENTION: A method of improving efficacy of biological response-modifying  
FILE REFERENCE:  
CURRENT APPLICATION NUMBER: US/10/519,390  
CURRENT FILING DATE: 2004-12-23  
PRIOR APPLICATION NUMBER: KR10-2003-0051846  
PRIOR FILING DATE: 2003-07-26  
NUMBER OF SEQ ID NOS: 65  
SOFTWARE: Kopatentin 1.71  
SEQ ID NO: 21  
LENGTH: 522  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: M-CSF: 35th, 37th, 54th, 67th, 91st, 106th, 121st, 135th, 143rd,  
OTHER INFORMATION: 229th, 255th, 311st, 439th, 466th or 485th Phe is replaced by  
OTHER INFORMATION: Val.  
US-10-519-390-21

Alignment Scores:  
Pred. No.: 27.9 Length: 522  
Score: 33.00 Matches: 5  
Percent Similarity: 100.0% Conservative: 2  
Best Local Similarity: 71.4% Mismatches: 0  
Query Match: 62.3% Indels: 0  
DB: 6 Gaps: 0

US-10-717-243-59 (1-28) x US-10-519-390-21 (1-522)

Qy 25 AAAATGAAGTCCTGTTTACA 5  
Db 86 ArgLeuLysSerCysPheThr 92

**RESULT 9**  
US-11-072-512-2449  
Sequence 2449, Application US/11072512  
Publication No. US2006029945A1  
GENERAL INFORMATION:  
APPLICANT: ISOGAI, TAKAO  
APPLICANT: SUGIYAMA, TOMOYASU  
APPLICANT: OTSUKI, TETSUJI  
APPLICANT: WAKAMATSU, AI  
APPLICANT: SATO, HIROYUKI  
APPLICANT: ISHII, SHIZUKO  
APPLICANT: YAMAMOTO, JUN-ICHI  
APPLICANT: ISONO, YUDRO  
APPLICANT: HIO, YURI  
APPLICANT: OTSUKA, KAORU  
APPLICANT: NAGAI, KEIICHI  
APPLICANT: IRIE, RYOTARO  
APPLICANT: TAMECHIKI, ICHIRO  
APPLICANT: SEKI, NAOKI  
APPLICANT: YOSHIKAWA, TSUTOMU  
APPLICANT: OTSUKA, MOTOUKU  
APPLICANT: NAGAHARI, KENJI

US-10-717-243-59 (1-28) x US-11-098-686-10347 (1-868)

Qy 25 AAAATGAAGTCCTGTTTACA 5  
Db 624 ArgMetArgSerCysPheThr 630

**RESULT 10**  
US-11-098-686-10347  
Sequence 10347, Application US/11098686  
Publication No. US2006002496A1  
GENERAL INFORMATION:  
APPLICANT: Kapur, Vivek and Gebhart, Connie J.  
TITLE OF INVENTION: NUCLEAR ACID AND POLYPEPTIDE SEQUENCES  
FILE REFERENCE: 09531-128301  
CURRENT APPLICATION NUMBER: US/11/098,686  
CURRENT FILING DATE: 2005-04-04  
PRIOR APPLICATION NUMBER: PCT/US03/31318  
PRIOR FILING DATE: 2003-10-01  
PRIOR APPLICATION NUMBER: US 60/416,395  
NUMBER OF SEQ ID NOS: 11433  
SOFTWARE: FastSEQ for Windows Version 4.0  
SEQ ID NO: 10347  
LENGTH: 868  
TYPE: PRT  
ORGANISM: Lawsonia intracellularis  
US-11-098-686-10347

Alignment Scores:  
Pred. No.: 27.3 Length: 868  
Score: 33.00 Matches: 5  
Percent Similarity: 100.0% Conservative: 2  
Best Local Similarity: 71.4% Mismatches: 0  
Query Match: 62.3% Indels: 0  
DB: 7 Gaps: 0

US-10-717-243-59 (1-28) x US-11-098-686-10347 (1-868)

Qy 25 AAAATGAAGTCCTGTTTACA 5  
Db 624 ArgMetArgSerCysPheThr 630

**RESULT 11**  
US-11-120-308-76  
Sequence 76, Application US/11120308  
Publication No. US2006000527A1  
GENERAL INFORMATION:

APPLICANT: Famodu, Omolayo O.  
 APPLICANT: Forge, Charlie  
 APPLICANT: Miao, Guo-Rua  
 TITLE OF INVENTION: cDNAs Encoding Polypeptides  
 FILE REFERENCE: BB-1365 US NA  
 CURRENT APPLICATION NUMBER: US/11/120,308  
 CURRENT FILING DATE: 2005-05-02  
 PRIOR APPLICATION NUMBER: US/10/078,770  
 PRIOR FILING DATE: 2002-02-19  
 PRIOR APPLICATION NUMBER: 09/614,188  
 PRIOR FILING DATE: 2000-07-12  
 PRIOR APPLICATION NUMBER: 60/143,400  
 PRIOR FILING DATE: 1999-07-12  
 PRIOR APPLICATION NUMBER: 60/153,534  
 PRIOR FILING DATE: 1999-09-13  
 PRIOR APPLICATION NUMBER: 60/161,223  
 PRIOR FILING DATE: 1999-10-22  
 PRIOR APPLICATION NUMBER: 60/159,878  
 PRIOR FILING DATE: 1999-10-15  
 PRIOR APPLICATION NUMBER: 60/157,401  
 PRIOR FILING DATE: 1999-10-01  
 PRIOR APPLICATION NUMBER: 60/143,419  
 PRIOR FILING DATE: 1999-07-12  
 PRIOR APPLICATION NUMBER: 60/143,409  
 PRIOR FILING DATE: 1999-07-12  
 NUMBER OF SEQ ID NOS: 196  
 SOFTWARE: Microsoft Office 97  
 SEQ ID NO: 76  
 LENGTH: 36  
 TYPE: PRT  
 ORGANISM: Zea mays  
 US-11-120-308-76

Alignment Scores:  
 Pred. No.: 49.9 Length: 36  
 Score: 32.00 Matches: 5  
 Percent Similarity: 75.0% Conservative: 1  
 Best Local Similarity: 62.5% Mismatches: 2  
 Query Match: 60.4% Indels: 0  
 DB: 7 Gaps: 0

US-10-717-243-59 (1-28) x US-11-120-308-76 (1-36)

Qy 5 TGTAAAAACGAGCTCATTTGGC 28  
 Db 7 CyBabntrArgIleLysPheGly 14

RESULT 12  
 US-10-995-561-605  
 Sequence 605, Application US/10995561  
 Publication No. US2005027205/A1  
 GENERAL INFORMATION  
 APPLICANT: CARGILL, Michele et al.  
 TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH  
 TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF  
 TITLE OF INVENTION: DETECTION AND USES THEREOF  
 FILE REFERENCE: CJO01559  
 CURRENT APPLICATION NUMBER: US/10/995,561  
 CURRENT FILING DATE: 2004-11-24  
 NUMBER OF SEQ ID NOS: 85702  
 SOFTWARE: PasteSEQ for Windows Version 4.0  
 SEQ ID NO: 605  
 LENGTH: 127  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-995-561-605

Alignment Scores:  
 Pred. No.: 47.5 Length: 127  
 Score: 32.00 Matches: 4  
 Percent Similarity: 87.5% Conservative: 3  
 Best Local Similarity: 50.0% Mismatches: 1  
 Query Match: 60.4% Indels: 0

DB: 6 GapS: 0  
 US-10-717-243-59 (1-28) x US-10-995-561-605 (1-127)  
 Qy 5 TGTAAAACGAGCTCATTTGGC 28  
 Db 78 CyBabntrArgIleLysPheGly 85

RESULT 13  
 US-10-821-234-1372  
 Sequence 1372, Application US/10821234  
 Publication No. US20050255114/A1  
 GENERAL INFORMATION:  
 APPLICANT: Labat, Ivan  
 APPLICANT: Stache-Crain, Birgit  
 APPLICANT: Andarmani, Susan  
 APPLICANT: Tang, Y. Tom  
 TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia  
 FILE REFERENCE: 821A  
 CURRENT APPLICATION NUMBER: US/10/821,234  
 CURRENT FILING DATE: 2004-04-07  
 PRIOR APPLICATION NUMBER: US 60/462,047  
 PRIOR FILING DATE: 2003-04-07  
 NUMBER OF SEQ ID NOS: 1704  
 SOFTWARE: pt SEQ\_Genes Version 1.0  
 SEQ ID NO: 1372  
 LENGTH: 211  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-10-821-234-1372

Alignment Scores:  
 Pred. No.: 46.6 Length: 211  
 Score: 32.00 Matches: 5  
 Percent Similarity: 83.3% Conservative: 0  
 Best Local Similarity: 83.3% Mismatches: 1  
 Query Match: 60.4% Indels: 0  
 DB: 6  
 US-10-717-243-59 (1-28) x US-10-821-234-1372 (1-211)

Qy 19 AAGTCTTGTTTACATGT 2  
 Db 50 LyssercyspheLeucyS 55

RESULT 14  
 US-11-132-285-61  
 Sequence 61, Application US/11132285  
 Publication No. US20050244876/A1  
 GENERAL INFORMATION:  
 APPLICANT: Human Genome Sciences, Inc.  
 TITLE OF INVENTION: Human Tumor Necrosis Factor Receptor TR13 and TR14  
 FILE REFERENCE: PP511P1  
 CURRENT APPLICATION NUMBER: US/11/132,285  
 CURRENT FILING DATE: 2005-05-19  
 PRIOR APPLICATION NUMBER: US/10/046,433  
 PRIOR FILING DATE: 2002-01-16  
 PRIOR APPLICATION NUMBER: 60/261,960  
 PRIOR FILING DATE: 2001-01-17  
 PRIOR APPLICATION NUMBER: 09/618,570  
 PRIOR FILING DATE: 2000-07-14  
 PRIOR APPLICATION NUMBER: 60/144,087  
 PRIOR FILING DATE: 1999-07-16  
 PRIOR APPLICATION NUMBER: 60/149,450  
 PRIOR FILING DATE: 1999-07-18  
 PRIOR APPLICATION NUMBER: 60/149,712  
 PRIOR FILING DATE: 1999-08-20  
 PRIOR APPLICATION NUMBER: 60/153,089  
 PRIOR FILING DATE: 1999-09-10  
 NUMBER OF SEQ ID NOS: 61  
 SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO: 61  
 LENGTH: 231

---

Job time : 12 secs

```

; TYPE: PRT      ORGANISM: Homo sapiens
; US-11-132-285-61

Alignment Scores:
Pred. No.: 46.4 Length: 231
Score: 32.00 Matches: 5
Percent Similarity: 75.0% Conservative: 1
Best Local Similarity: 62.5% Mismatches: 2
Query Match: 60.4% Indels: 0
DB: 7 Gaps: 0

US-10-717-243-59 (1-28) x US-11-132-285-61 (1-231)

Qy 25 AAAATGAGTCTGGTTACATGT 2
    |||| ::||||| | ||||| |
Db 57 LysCysGlnSerCysIleThrCys 64

```

RESULT 15

```

US-11-072-3294
Sequence 3294, Application US/11072512
Publication No. US20060029945A1

GENERAL INFORMATION:
APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYASU
APPLICANT: OTSUKI, TETSUJI
APPLICANT: WAKAMATSU, AI
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
APPLICANT: YAMAMOTO, JUN-ICHI
APPLICANT: ISONO, YUDRO
APPLICANT: HIO, YURI
APPLICANT: OTSUKA, KAROU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKI, TOSHIRO
APPLICANT: SEKI, NAOKI
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTONARI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: Novel full length cDNA
FILE REFERENCE: 084335-0191

CURRENT APPLICATION NUMBER: US/11/072,512
CURRENT FILING DATE: 2005-03-07
PRIOR APPLICATION NUMBER: US 60/350,978
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: JP 2001-379298
PRIOR FILING DATE: 2001-11-05
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 3294
LENGTH: 238
TYPE: PRT
ORGANISM: Homo sapiens
US-11-072-512-3294

Alignment Scores:
Pred. No.: 46.4 Length: 238
Score: 32.00 Matches: 5
Percent Similarity: 83.3% Conservative: 0
Best Local Similarity: 83.3% Mismatches: 1
Query Match: 60.4% Indels: 0
DB: 7 Gaps: 0

US-10-717-243-59 (1-28) x US-11-072-512-3294 (1-238)

Qy 19 AAGTCPTGGTTACATGT 2
    |||| ::||||| | ||||| |
Db 128 LysSerCysPheCysCys 133

```

Search completed: February 17, 2006, 10:11:42

GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: February 17, 2006, 09:46:44 (without alignments)  
112.253 Million cell updates/sec

Title: US-10-717-243-59

Perfect score: 53

Sequence: 1 CACATGAAACAGACTCATTTGGC 28

Scoring table: BLOSUM62

Xgapext	0.5
Ygapop	0.5
Fgapop	7.0
Delop	7.0

Searched: 283416 seqs, 9616763 residues

Total number of hits satisfying chosen parameters: 566832

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

```
-MODEL=frame_plus_n2p model1 -DEV=x1p
-Q=/abs/_spool -SUFFIX=x1p -RUNID=runat_16022006_160652_2247/app_query.fasta_1
-DB=PIR -QFT=fastan -SUFFIX=x1p -MINMATCH=0.1 -LOOPEXT=0
-UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi LIST=45
-DOCALIGN=1 -THR_SCORE=-PCT -THR_MAX=100 -THR_MIN=0 -ALIGNN=15 -MODE=LOCAL
-OUTFILE=pt0 -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=100 -HOST=abs02p
-USER=US1071743 @CGN 1-163 @runat_16022006_160652_2247 -NCPU=6 -ICPU=3
-NMAP -NCPOP -SCORES=0 -WAIT -DEBLOCK=100 -LONGLOG -DEV TIMEOUT=120
-WARN TIMEOUT=30 -THREADS=1 -XGAPPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELPOP=6 -DELEXT=7
```

Database : PIR\_B0:  
1: pir1:  
2: pir2:  
3: pir3:  
4: pir4:  
Pred. No. is the number of results predicted by chance to have a predicted score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description
1	43	81.1	316	2	JT0753	rRNA N-glycosidase
c 2	40	75.5	133	2	S69759	hypothetical prote
c 3	37	69.8	391	2	T32156	hypothetical prote
c 4	37	69.8	1024	2	T41493	probable leucine D
c 5	37	69.8	1226	2	B84493	hypothetical prote
c 6	36	67.9	117	2	PH1542	IG H chain V regio
c 7	36	67.9	117	2	PH1152	hypothetical prote
c 8	36	67.9	381	2	T47144	hypothetical prote
c 9	35	66.0	107	2	T48759	hypothetical prote
c 10	35	66.0	108	2	H69334	hypothetical prote
c 11	35	66.0	245	2	C70090	hypothetical prote
c 12	35	66.0	379	2	A35878	class I major hist
c 13	35	66.0	406	2	B35878	class I major hist
c 14	35	66.0	516	2	A48678	activin receptor I

ALIGMENTS

Result	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	9999
--------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

RESULTS

Score

Match

Length

DB

ID

Description

RNA N-glycosidase hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG> R; Montecuccchi, P.C.; Lazzarin, A.M.; Barbieri, L.; Stirpe, F.; Soria, M.; Lappi, D. Int. J. Pept. Protein Res. 33, 263-267, 1989 A; Title: N-terminal sequence of some ribosome-inactivating proteins A; Reference number: S16489 A; Accession: S16489 A; Molecular type: protein A; Residues: 47-89, 'K', 91-92, 'D', <MON> A; Cross-references: UNIPARC:UP10000177F26 C; Function: hydrolyzes the N-glycosidic bond of a specific adenosine in 28S rRNA the C; Superfamily: rRNA N-glycosidase homology C; Keywords: glycosidase; hydrolase F; 1-46 Domain: signal sequence #status predicted <SIG>

US-10-717-243-59 (1-28) x JT0753 (1-316)

Qy 2 ACATGTAACAGACTTCAATTGGC 28  
T41415  
Db 148 ThrIleLysArgLeuHisPheGly 156

RESULT 2  
S67559 hypothetical protein YDR157w - yeast (Saccharomyces cerevisiae)  
C;Species: Saccharomyces cerevisiae  
C;Date: 23-Aug-1996 #sequence\_revision 06-Sep-1996 #text\_change 29-Oct-1999  
C;Accession: S67559  
R;Murphy, L.; Richards, C.; Harris, D.  
Submitted to the EMBL Data Library, July 1995  
A;Reference number: S57971  
A;Accession: S69759  
A;Molecule type: DNA  
A;Residues: 1-133 <NTR>  
A;Cross-references: UNIPARC:UPT00001682EF; EMBL:250046; GSPDB:GN00004; MIPS:YDR157w  
C;Genetics:  
A;Gene: MIPS:YDR157w  
A;Map position: 4R  
C;Superfamily: Saccharomyces hypothetical protein YDR157w

Alignment Scores:  
Pred. No.: 6.2 Length: 133  
Score: 40.00 Matches: 6  
Percent Similarity: 100.0% Conservative: 2  
Best Local Similarity: 75.0% Mismatches: 0  
Query Match: 75.5% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x S69759 (1-133)

Qy 25 AAAATGAAGTCCTGTGTTACATGT 2  
T32156  
Db 118 LysIleLysSerCysSerSerCys 125

RESULT 3  
T32156 hypothetical protein C29G2.5 - Caenorhabditis elegans  
C;Species: Caenorhabditis elegans  
C;Accession: T32156  
R;Back, C.; Wanley, P.  
Submitted to the EMBL Data Library, September 1997  
A;Description: The sequence of C. elegans cosmid C29G2.  
A;Reference number: Z21128  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: DNA  
A;Residues: 1-391 <BBC>  
A;Cross-references: UNIPROT:O16884; UNIPARC:UPI0000082951; EMBL:AF022969; PIDN:AAB69894.  
A;Experimental source: strain Bristol N2; clone C29G2  
C;Genetics:  
A;Gene: CBSP:C29G2.5  
A;Map position: 5  
A;Introns: 8/1; 84/1; 113/1; 175/3; 316/3

Alignment Scores:  
Pred. No.: 25.1 Length: 391  
Score: 37.00 Matches: 5  
Percent Similarity: 77.8% Conservative: 2  
Best Local Similarity: 55.6% Mismatches: 2  
Query Match: 69.8% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x T32156 (1-391)

Qy 2 ACATGAAAGAAAGACTTCAATTGGC 28  
PH1342  
Db 19 SerCysArgThrHisPheHisPheGly 27

RESULT 4  
T41415 probable leucine permease transcription regulator - fission yeast (Schizosaccharomyces pombe)  
C;Species: Schizosaccharomyces pombe  
C;Date: 03-Dec-1999 #sequence\_revision 03-Dec-1999 #text\_change 09-Jul-2004  
R;Wood, V.; Rajandream, M.A.; Barrell, B.G.; Murphy, L.; Harris, D.  
Submitted to the EMBL Data Library, September 1998  
A;Reference number: 221954  
A;Accession: T41415  
A;Status: preliminary; translated from GB/EMBL/DBJ  
A;Molecule type: DNA  
A;Residues: 1-1024 <WOO>  
A;Cross-references: UNIPROT:O74899; UNIPARC:UPI000006ADB9; EMBL:AL031798; PIDN:CAA21184.  
A;Experimental source: strain 972H-; cosmid c576  
C;Genetics:  
A;Gene: SPBC576.05  
A;Map position: 3  
A;Introns: 169/3; 251/1; 431/1

Alignment Scores:  
Pred. No.: 23.8 Length: 1024  
Score: 37.00 Matches: 6  
Percent Similarity: 100.0% Conservative: 0  
Best Local Similarity: 100.0% Mismatches: 0  
Query Match: 69.8% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x T41415 (1-1024)

Qy 10 AACAGACTTCATTTGG 27  
Db 781 AsnLysThrSerPhePheTrp 786

RESULT 5  
E84923 hypothetical protein At2g48110 [imported] - Arabidopsis thaliana (mouse-ear cress)  
C;Species: Arabidopsis thaliana (mouse-ear cress)  
C;Accession: E84923  
R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fuji, C.Y.;  
M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; vanAken, S.B.; Tallon, L.;  
euss, D.; Nieman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.  
Nature 402, 761-768, 1999  
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana.  
A;Reference number: A84420; MUID:20083487; PMID:10617197  
A;Accession: E84923  
A;Status: preliminary  
A;Molecule type: DNA  
A;Residues: 1-1226 <STO>  
A;Cross-references: UNIPROT:Q9ZUT8; UNIPARC:UPI00017A033;  
C;Genetics:  
A;Gene: At2g48110  
A;Map position: 2

Alignment Scores:  
Pred. No.: 23.6 Length: 1226  
Score: 37.00 Matches: 5  
Percent Similarity: 100.0% Conservative: 2  
Best Local Similarity: 71.4% Mismatches: 0  
Query Match: 69.8% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x E84923 (1-1226)

Qy 22 ATGAGTCCTGTTTACATGT 2  
Db 940 LeuArgSerCysPheThrCys 946

RESULT 6  
PH1342  
IG H chain V region (clone 7D8) - mousee (fragment)

C;Species: Mus musculus (house mouse)  
 C;Date: 27-Jun-1994 #sequence\_revision 27-Jun-1994 #text\_change 17-Mar-1999  
 C;Accession: PH1542  
 R;Mukherjee, J.; Casadevall, A.; Scharff, M.D.  
 J.; Exp. Med. 177, 1105-1116, 1993  
 A;Title: Molecular characterization of the humoral responses to *Cryptococcus neoformans*  
 A;Reference number: PH1526; PMID:93210465; PMID:8459205  
 A;Accession: PH1542  
 A;Molecule type: mRNA  
 A;Residues: 1-117 <MTK>  
 A;Cross-references: UNIPARC:UPI00001768BC  
 C;Superfamily: immunoglobulin V region; immunoglobulin homology  
 C;Keywords: immunoglobulin V region; immunoglobulin homology <IMM>  
 F;14-97/Domain: immunoglobulin homology <IMM>

Alignment Scores:  
 Pred. No.: 43.7 Length: 117  
 Score: 36.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0%  
 Query Match: 67.9%  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x PH1542 (1-117)

Qy 5 TGTAACAAAGACTCATTTGGC 28  
 Db 95 CybLystrhArgArgTyRpheGly 102

RESULT 7

PH1552  
 19 H chain V region (clone 16B4) - mouse (fragment)  
 C;Species: Mus musculus (house mouse)  
 C;Date: 27-Jun-1994 #sequence\_revision 27-Jun-1994 #text\_change 21-Jan-2000  
 C;Accession: PH1552  
 R;Mukherjee, J.; Casadevall, A.; Scharff, M.D.  
 J.; Exp. Med. 177, 1105-1116, 1993  
 A;Title: Molecular characterization of the humoral responses to *Cryptococcus neoformans*  
 A;Reference number: PH1526; PMID:93210465; PMID:8459205  
 A;Accession: PH1552  
 A;Molecule type: mRNA  
 A;Residues: 1-117 <MTK>  
 A;Cross-references: UNIPARC:UPI000017695E  
 C;Superfamily: immunoglobulin V region; immunoglobulin homology  
 C;Keywords: immunoglobulin V region; immunoglobulin homology <IMM>  
 F;15-97/Domain: immunoglobulin homology <IMM>

Alignment Scores:  
 Pred. No.: 43.7 Length: 117  
 Score: 36.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0%  
 Query Match: 67.9%  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x PH1552 (1-117)

Qy 5 TGTAACAAAGACTCATTTGGC 28  
 Db 95 CybLystrhArgArgTyRpheGly 102

RESULT 8

T47144  
 hypothetical protein DKFZp761E1347.1 - human (fragment)  
 C;Species: Homo sapiens (man)  
 C;Date: 20-Apr-2000 #sequence\_revision 20-Apr-2000 #text\_change 20-Apr-2000  
 C;Accession: T47144  
 R;Pouletka, A.; Wellenreuther, R.; Mewes, H.W.; Weil, B.; Wiemann, S.  
 Submitted to the Protein Sequence Database, March 2000  
 A;Reference number: 224374  
 A;Accession: T47144  
 A;Status: preliminary

A;Molecule type: mRNA  
 A;Residues: 1-181 <AAA>  
 A;Cross-references: UNIPARC:UPI000016ACD1; EMBL:AL161952  
 A;Experimental source: adult amygdala; clone DKFZp761E1347  
 C;Genetics:  
 A;Note: DKFZp761E1347.1

Alignment Scores:  
 Pred. No.: 41 Length: 381  
 Score: 36.00 Matches: 5  
 Percent Similarity: 62.5% Conservative: 2  
 Best Local Similarity: 62.5%  
 Query Match: 67.9%  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x T47144 (1-381)

Qy 25 AAAATGAAGTCCTTGTATCATGT 2  
 Db 154 LysLeuLysTrcCysTrrhCys 161

RESULT 9

T48759  
 hypothetical protein 13E11.70 [imported] - *Neurospora crassa*  
 C;Species: Neurospora crassa  
 C;Date: 05-May-2000 #sequence\_revision 05-May-2000 #text\_change 19-May-2000  
 C;Accession: T48759  
 R;Schulte, U.; Aign, V.; Hoheisel, J.; Branda, P.; Partmann, B.; Holland, R.; Nyakatura, A;Submitted to the Protein Sequence Database, April 2000  
 A;Reference number: Z24541  
 A;Accession: T48759  
 A;Status: preliminary  
 A;Molecule type: DNA  
 A;Residues: 1-107 <SC>  
 A;Cross-references: UNIPARC:UPI000017947A; EMBL:AU353820; GSPDB:GR000112; NCSP:13E11.70  
 A;Experimental source: cosmid contig 13E11; strain 74  
 C;Genetics:  
 A;Gene: NCSP:13E11.70  
 A;Map Position: 2  
 C;Superfamily: Neurospora crassa hypothetical protein 13E11.70

Alignment Scores:  
 Pred. No.: 71.5 Length: 107  
 Score: 35.00 Matches: 6  
 Percent Similarity: 85.7% Conservative: 0  
 Best Local Similarity: 85.7%  
 Query Match: 66.0%  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x T48759 (1-107)

Qy 5 TGTAAACACAGACTCATTTATT 25  
 Db 77 CysLystrhLeuLeuHisPhe 83

RESULT 10

H69834  
 hypothetical protein yhjQ - *Bacillus subtilis*  
 C;Species: Bacillus subtilis  
 C;Date: 05-Dec-1997 #sequence\_revision 05-Dec-1997 #text\_change 09-Jul-2004  
 C;Accession: H69834  
 R;Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Azevedo, V.; Bertero, C.; Bron, S.; Brouillet, S.; Caldwell, B.; Capuano, V.; Carrer, N.M.; Chacon, A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E.; Foulger, D.; Fritz, C.; Fujita, M.; Galizzi, A.; Galler, M.; Hullo, M.F.; Kielich, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holzapfel, S.; Kurita, K.; Lapied, A.; Lardinois, S.; Masuda, S.; Maezel, A.; Koetter, P.; Koningsgelein, G.; Krogh, S.; Kumano, M.; Levine, A.; Liu, H.; Matsuura, S.; Ogawa, K.; Ogiwara, A.; Ouduga, B.; Park, S.H.; Parco, V.; Pohl, T.M.; Portetelle, Rieger, M.; Rivolta, C.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A.; Schleicher, S.; Schreuter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Seron, Akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpetra, P.; Tognoni, A.; Tobato, V.; Uchiyama,

T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, K.  
 A.; Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.  
 A.; Title: The complete genome sequence of the Gram-positive bacterium *Bacillus subtilis*.  
 A.; Reference number: A69580; MUID:98044033; PMID:384377  
 A.; Accession: H69834  
 A.; Status: preliminary; nucleic acid sequence not shown; translation not shown  
 A.; Molecular type: DNA  
 A.; Residues: 1-108 <KUN>  
 A.; Cross-references: UNIPROT:007571; UNIPARC:UPI00000601B7; GB:AL009126; NID:9  
 A.; Experimental source: strain 168  
 C.; Genetics:  
 A.; Gene: ynjQ

Alignment Scores:  
 Pred. No.: 71.5 Length: 108  
 Score: 35.00 Matches: 5  
 Percent Similarity: 100.0% Conservative: 1  
 Best Local Similarity: 83.3% Mismatches: 0  
 Query Match: 66.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) × H69834 (1-108)

Qy 19 AAGTCTGTTCATGT 2  
 ||| :||| ||| ||| |||  
 Db 94 LysAlaCysPheThrCys 99

RESULT 11

C70050 hypothetical protein YycO - *Bacillus subtilis*  
 C.; Species: *Bacillus subtilis*  
 C.; Date: 05-Dec-1997 #sequence\_revision 05-Dec-1997 #text\_change 09-Jul-2004  
 C.; Accession: C70050  
 R.; Kunst, F.; Ogawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Bertero, R.; Hilbert, H.; Holzapfel, S.; Hosono, S.; Hull, M.F.; Koetter, P.; Koningschein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidoth, A.; Lardinois, A.; Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Maueda, S.; Mauel, Y., M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetelle, Rieger, M.; Rivolta, C.; Rocha, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A.; Authors: Schleich, S.; Schröter, R.; Scuffone, F.; Sekiguchi, J.; Sekowska, A.; Serod-Akouchi, M.; Tamakoshi, A.; Tanaka, T.; Terapana, P.; Tosato, A.; Uchiyama, T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, K.  
 A.; Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.  
 A.; Title: The complete genome sequence of the Gram-positive bacterium *Bacillus subtilis*.  
 A.; Reference number: A69580; MUID:98044033; PMID:984377  
 A.; Status: preliminary; nucleic acid sequence not shown; translation not shown  
 A.; Molecular type: DNA  
 A.; Residues: 1-245 <KUN>  
 A.; Cross-references: UNIPROT:Q45607; UNIPARC:UPI0000060CF9; GB:Z99124; GB:AL009126; NID:9  
 A.; Experimental source: strain 168  
 C.; Genetics:  
 A.; Gene: yycO

Alignment Scores:  
 Pred. No.: 68.3 Length: 245  
 Score: 35.00 Matches: 7  
 Percent Similarity: 87.5% Conservative: 0  
 Best Local Similarity: 87.5% Mismatches: 1  
 Query Match: 66.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) × C70050 (1-245)

Qy 3 CATCTAAACAAAGACTCATTTG 26  
 ||| :||| ||| ||| ||| |||  
 Db 61 HisValLeuGlnAspValIleu 68

RESULT 12

A35878 class I major histocompatibility antigen PCC3-4/27 - mouse  
 A.; Species: *Mus musculus* (house mouse)  
 C; Date: 12-Oct-1990 #sequence\_revision 12-Oct-1990 #text\_change 09-Jul-2004  
 C.; Accession: A35798  
 R.; Ito, K.; Van Kaer, L.; Bonneville, M.; Hsu, S.; Murphy, D.B.; Tonegawa, S.  
 A.; Title: Recognition of the product of a novel MHC TL region gene (27(b)) by a mouse gamete  
 A.; Reference number: A35878  
 A.; Status: preliminary  
 A.; Molecule type: mRNA  
 A.; Residues: 1-379 <ITO>  
 A.; Cross-references: UNIPROT:Q31615; UNIPARC:UPI0000028E40; GB:M35243; NID:9199647; PIDN: F; 208-273/Domain: immunoglobulin homology <IMM>  
 C; Superfamily: class I histocompatibility antigen; immunoglobulin homology <IMM>  
 Alignment Scores:  
 Pred. No.: 66.7 Length: 379  
 Score: 35.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0% Mismatches: 1  
 Query Match: 66.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) × A35878 (1-379)

Qy 25 AAAATGAAGTCCTGTTACATGT 2  
 ||| :||| ||| ||| |||  
 Db 356 LysIleSerCysLysThrCys 363

RESULT 13

B35878 class I major histocompatibility antigen PCC3-24 - mouse  
 C.; Species: *Mus musculus* (house mouse)  
 C.; Date: 12-Oct-1990 #sequence\_revision 12-Oct-1990 #text\_change 09-Jul-2004  
 C.; Accession: B35878  
 R.; Ito, K.; Van Kaer, L.; Bonneville, M.; Hsu, S.; Murphy, D.B.; Tonegawa, S.  
 A.; Authors: Fonlger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galler, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holzapfel, S.; Hull, M.F.; Koetter, P.; Koningschein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidoth, A.; Lardinois, A.; Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Maueda, S.; Mauel, Y., M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetelle, Rieger, M.; Rivolta, C.; Rocha, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon, A.; Authors: Schleich, S.; Schröter, R.; Scuffone, F.; Sekiguchi, J.; Sekowska, A.; Serod-Akouchi, M.; Tamakoshi, A.; Tanaka, T.; Terapana, P.; Tosato, A.; Uchiyama, T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, K.  
 A.; Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.  
 A.; Title: The complete genome sequence of the Gram-positive bacterium *Bacillus subtilis*.  
 A.; Reference number: A69580; MUID:98044033; PMID:984377  
 A.; Status: preliminary; nucleic acid sequence not shown; translation not shown  
 A.; Molecular type: DNA  
 A.; Residues: 1-245 <KUN>  
 A.; Cross-references: UNIPROT:Q45607; UNIPARC:UPI0000060CF9; GB:Z99124; GB:AL009126; NID:9  
 A.; Experimental source: strain 168  
 C.; Genetics:  
 A.; Gene: yycO

Alignment Scores:  
 Pred. No.: 66.4 Length: 406  
 Score: 35.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0% Mismatches: 1  
 Query Match: 66.0% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) × B35878 (1-406)

Qy 25 AAAATGAAGTCCTGTTACATGT 2  
 ||| :||| ||| ||| |||  
 Db 356 LysIleSerCysLysThrCys 363

RESULT 14

A48678 activating receptor II precursor - fruit fly (*Drosophila melanogaster*)  
 C.; Species: *Drosophila melanogaster*  
 C.; Date: 03-May-1994 #sequence\_revision 03-May-1994 #text\_change 31-Dec-2004  
 C.; Accession: A48678  
 R.; Childs, S.R.; Wraa, J.L.; Arora, K.; Attisano, L.; O'Connor, M.B.; Massague, J.  
 Proc. Natl. Acad. Sci. U.S.A. 90: 9475-9479, 1993  
 A.; Title: Identification of a *Drosophila* activin receptor.  
 A.; Reference number: A48678; MUID:9402297; PMID:8415726

A;Accession: A48678  
A;Status: preliminary  
A;Molecule type: mRNA  
A;Residues: 1-51 <CHI>  
C;Cross-references: UNIPROT:Q24229; UNIPARC:UPI000007E5D2; GB:L22176; PIDN:9408504;  
C;Genetics:  
A;Gene: FlyBase:put  
A;Cross-references: FlyBase:FBgn0003169  
C;Keywords: ArgP; 200-494; Domain: protein kinase homology <KIN>

Alignment Scores:  
Pred. No.: 65.6 Length: 516  
Score: 35.00 Matches: 6  
Percent Similarity: 85.7% Conservative: 0  
Best Local Similarity: 85.7% Mismatches: 1  
Query Match: 66.0% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x A48678 (1-516)

Qy	25 AAAATGAAAGCTTGTTTACA	5
Db	83 LysMetLysGlyCysPheThr	89

RESULT 15

T27407 hypothetical protein:Y75B8A.25 - Caenorhabditis elegans  
C;Species: *Caenorhabditis elegans*  
C;Date: 15-Oct-1999 #sequence\_revision 15-Oct-1999 #text\_change 31-Dec-2004  
C;Accession: T27407  
R;Barlow, K.  
E;Submitted to the EMBL Data Library, November 1998  
A;Reference number: Z20361  
A;Accession: T27407  
A;Status: preliminary; translated from GB/EMBL/DDJB  
A;Molecule type: DNA  
A;Residues: 1-570 <WIL>  
A;Cross-references: UNIPROT:Q9XW62; UNIPARC:UPI00000767FB; EMBL:AL033514; PIDN:CAA22109.  
A;Experimental source: clone Y75B8A  
C;Genetics:  
A;Gene: CBSP; Y75B8A.25  
A;Introns: 38/2; 128/2; 327/3; 389/3; 475/1; 518/3

Alignment Scores:  
Pred. No.: 65.2 Length: 570  
Score: 35.00 Matches: 6  
Percent Similarity: 85.7% Conservative: 0  
Best Local Similarity: 85.7% Mismatches: 1  
Query Match: 66.0% Indels: 0  
DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x T27407 (1-570)

Qy	2 ACATGTAACAAAGACTTCAT	22
Db	519 ThrcClysProArgLeuHis	525

Search completed: February 17, 2006, 09:52:22  
Job time : 26 sec

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7	Q7ZVN4	brachydanio
Copyright (c) 1993 - 2006 Biocceleration Ltd.	Q4rlk6	tetraodon n
MM nucleic - protein search, using frame_plus_n2p model	Q6nlj6	drosophila
run on: February 17, 2006, 09:42:19 ; Search time 29.5 Seconds (133.931 Million cell updates/sec)	QBBnr2	mus musculu
title: US-10-717-243-59	Q8izn3	homo sapien
perfect score: 53	Q5js07	homo sapien
sequence: 1 CACATGAAAAAACAGACTTCATTGGC 28	Q8bgq1	mus musculu
scoring table: BLOSUM62	Q5sny0	brachydanio
scoring table: Xgapop 10.0 , Xgapext 0.5	Q9vtv6	drosophila
Ygapop 10.0 , Ygapext 0.5	Q4sh44	tetraodon n
Fgapop 6.0 , Fgapext 7.0	Q589r6	ciona intestinalis
Delop 6.0 , Delext 7.0	Q5blg3	brachydanio
searched:	Q8Kac3	oryza sativa
2166443 seqs, 70528306 residues	Q4h2k8	ciona intestinalis
	Q55a36	dictyostelia
	Q4phn5	ustilago maydis
	Q86ky8	dictyostelia
	Q5ba34	dictyostelia
	Q86kz0	dictyostelia
	Q8bup1	mus musculus
	Q8xke5	petunia x veitchii
	Q91dm0	petunia x veitchii
	Q6xke6	petunia x veitchii
Total number of hits satisfying chosen parameters:	4332886	
Minimum DB seq length: 0	Q82rr3	strepomyces
Maximum DB seq length: 2000000000	Q13629	homo sapiens
Post-processing: Minimum Match 0%	Q5lre	cantharabdi
	Q67zg96	arabidopsis thaliana
	Q9lry6	arabidopsis thaliana
	Q8nm4	arabidopsis thaliana

ATTACHMENT S

Db	206 LysMetLySAlaCysPheThrCys	213	Pred. No.:	2.1	Length:	382
RESULT 2			Score:	45.00	Matches:	7
Q68006_ARATH	ARATH PRELIMINARY;	PRT;	Percent Similarity:	100.0%	Conservative:	1
ID Q68006;			Best Local Similarity:	87.5%	Mismatches:	0
AC			Query Match:	84.9%	Indels:	0
DT 25-OCT-2004	(TREMBLrel. 28, Created)	DB:			Gaps:	0
DT 25-OCT-2004	(TREMBLrel. 28, Last sequence update)					
DE Hypothetical protein At2g40640 (Fragment).						
GN Name-At2g40640;						
OS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.						
OX NCBI_TaxID=3702;						
RN [1]						
RP NUCLEOTIDE SEQUENCE.						
RA Totoki Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A., Narusaka M., Shin-i T., Nakagawa M., Sakamoto N., Oishi K., Kohara Y., Kobayashi M., Toyoda A., Sakai Y., Sakurai T., Iida K., Akiyama K., Satou M., Toyoda T., Konagaya A., Carninci P., Kawai J., Hayashizaki Y., Shinozaki K.						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17771; BAD43534.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 365 AA; 41136 MW; F9C4B9A6A1C62DD9F CRC64;						
Alignment Scores:						
Pred. No.:	2.09	Length:	365			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q68006_ARATH (1-365)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 219 LysMetLySAlaCysPheThrCys 226						
RESULT 3						
Q67KS7_ARATH	ARATH PRELIMINARY;	PRT;	382 AA.			
ID Q67KS7;						
AC						
DT 25-OCT-2004	(TREMBLrel. 28, Created)					
DT 25-OCT-2004	(TREMBLrel. 28, Last sequence update)					
DE Hypothetical protein At2g40640 (Fragment).						
GN Name-At2g40640;						
OS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.						
OX NCBI_TaxID=3702;						
RN [1]						
RP NUCLEOTIDE SEQUENCE.						
RA Totoki Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A., Narusaka M., Shin-i T., Nakagawa M., Sakamoto N., Oishi K., Kohara Y., Kobayashi M., Toyoda A., Sakai Y., Sakurai T., Iida K., Akiyama K., Satou M., Toyoda T., Konagaya A., Carninci P., Kawai J., Hayashizaki Y., Shinozaki K.						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 4						
Q58FY4_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q58FY4;						
AC						
DT 10-MAY-2005	(TREMBLrel. 30, Created)					
DT 10-MAY-2005	(TREMBLrel. 30, Last sequence update)					
DE Hypothetical protein At2g0640.						
GN ORFnames-At2g0640;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 5						
Q8GUT1_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q8GUT1;						
AC						
DT 01-MAR-2003	(TREMBLrel. 23, Created)					
DT 01-MAR-2003	(TREMBLrel. 23, Last sequence update)					
DE Hypothetical protein T2P4.1.						
GN Name=T2P4.1;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 6						
Q8GUT1_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q8GUT1;						
AC						
DT 01-MAR-2003	(TREMBLrel. 23, Created)					
DT 01-MAR-2003	(TREMBLrel. 23, Last sequence update)					
DE Hypothetical protein T2P4.1.						
GN Name=T2P4.1;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 7						
Q8GUT1_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q8GUT1;						
AC						
DT 01-MAR-2003	(TREMBLrel. 23, Created)					
DT 01-MAR-2003	(TREMBLrel. 23, Last sequence update)					
DE Hypothetical protein T2P4.1.						
GN Name=T2P4.1;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 8						
Q8GUT1_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q8GUT1;						
AC						
DT 01-MAR-2003	(TREMBLrel. 23, Created)					
DT 01-MAR-2003	(TREMBLrel. 23, Last sequence update)					
DE Hypothetical protein T2P4.1.						
GN Name=T2P4.1;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						
Pred. No.:	2.1	Length:	383			
Score:	45.00	Matches:	7			
Percent Similarity:	100.0%	Conservative:	1			
Best Local Similarity:	87.5%	Mismatches:	0			
Query Match:	84.9%	Indels:	0			
DB:	2	Gaps:	0			
US-10-717-243-59 (1-28) x Q58FY4_ARATH (1-383)						
Qy 25 AAAATGAGTCCTGTTACATGT 2						
Db 237 LysMetLySAlaCysPheThrCys 244						
RESULT 9						
Q8GUT1_ARATH	ARATH PRELIMINARY;	PRT;	383 AA.			
ID Q8GUT1;						
AC						
DT 01-MAR-2003	(TREMBLrel. 23, Created)					
DT 01-MAR-2003	(TREMBLrel. 23, Last sequence update)					
DE Hypothetical protein T2P4.1.						
GN Name=T2P4.1;						
OS Arabidopsis thaliana (Mouse-ear cress).						
RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) submitted (SEP-2004) to the EMBL/GenBank/DBJ databases.						
DR EMBL: AK17641; BAD4504.1; -; mRNA.						
FT NON TER 1 1						
SQ SEQUENCE 382 AA; 43170 MW; 9FC42DD001F2226FE CRC64;						
Alignment Scores:						

RA Xiao Y., Smith S.R., Ishmael N., Kumar N., Redman J., Riedmiller S., Utterback T., Whitehead C.A., Fraser C.M., Town C.D.; Submitted (OCT 2002) to EMBL/GenBank/DDJB databases.

RL DR PRINTS; PR00161; PIP; 1.

RW EMBL; AX16899; AA011670.1; - ; mRNA.

RW Hypothetical Protein.

SQ SEQUENCE 383 AA; 43206 MW; 9993C935E4BF1C99 CRC64;

Alignment Scores:

Pred. No. :	2.1	Length:	383
Score:	45.00	Matches:	7
Percent Similarity:	100.0%	Conservative:	1
Best Local Similarity:	87.5%	Mismatches:	0
Query Match:	84.9%	Indels:	0
DB:	2	Gaps:	0

US-10-717-243-59 (1-28) x Q8GUT1\_ARATH (1-383)

Qy 25 AAATGAGTCGTGTTACATG 2

Db 237 LysMetLysAlaCysPheThrCys 244

RESULT 6 ;

RIPG\_GELMU RIPG\_GELMU STANDARD; PRT; 316 AA.

ID P13186; AC DT (Rel. 27, Created) 01-OCT-1993 (Rel. 32, Last sequence update) 01-NOV-1995 (Rel. 47, Last annotation update) 10-MAY-2005 (Rel. 47, Last annotation update)

DE Ribosome-inactivating protein gelonin precursor (EC 3.2.2.22) (rRNA N-glycosidase).

GN Name=GLN; Name=GLL;

OS Gelonium multiflorum (Euphorbiaceae himalaya).

OC Spermatophyta; Magnoliophyta; Embryophyta; Tracheophyta;

OC rosids; euroids I; Malpighiales; Euphorbiaceae; Crotonoideae;

OC Geloniae; Gelonium.

OM NCBI\_TaxID=3977;

RP NUCLEOTIDE SEQUENCE OF 47-93.

RX MEDLINE:94085781; PubMed=7916721; DOI=10.1016/0378-1119(93)90097-M;

RA Nolan B.A., Garrison D.A., Better M.,

RT "Cloning and expression of a gene encoding gelonin, a ribosome-inactivating protein from *Gelonium multiflorum*.";

RT Gene 134:223-227(1993).

RN [2]

RP PROTEIN SEQUENCE OF 47-93.

RX TISSUE-SEED; MEDLINE:89326691; PubMed=2753596;

RA Montecuccchi P.-C., Lazzarini A.M., Barbieri L., Stirpe F., Soria M., Lappi D.;

RT "N-terminal sequence of some ribosome-inactivating proteins".

RI Int. J. Pept. Protein Res. 33:263-267(1999).

RN [3]

RP X-RAY CRYSTALLOGRAPHY (1.8 ANGSTROMS).

RX MEDLINE:95333189; PubMed=7608981;

RA Kannan K.K., Nair B., Satyanurthy P., Misquith S., Surolia A., RT "X-ray structure of gelonin at 1.8-A resolution.";

RL J. Mol. Biol. 250:368-380 (1995).

CC -; CATALYTIC ACTIVITY: Endohydrolysis of the N-Glycosidic bond at one specific adenosine on the 28S rRNA.

CC -; SUBUNIT: Homodimer.

CC -; SIMILARITY: Belongs to the ribosome-inactivating protein family. Type 1 RIP subfamily.

CC This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.

CC DR EMBL; I12243; AA116312.1; - ; mRNA.

CC DR PIR; JP0753; JT0753.

DR	PROSITE; PS50162; RECA_2; 1.			
XW	Complete proteome.			
SQ	SEQUENCE 465 AA; 51817 MW;	1472774706CD287B CRC64;		
Alignment Scores:				
Pred. No.:	5.86	Length: 465		
Score:	43.00	Matches: 7		
Percent Similarity:	88.9%	Conservative: 1		
Best Local Similarity:	77.8%	Mismatches: 1		
Query Match:	81.1%	Indels: 0		
DB:	2	Gaps: 0		
US-10-717-243-59 (1-28) x Q89017_CLOTE (1-465)				
Qy	28 GCCAAATGAGTCTGTTCACATGT 2			
Db	13 AlaLysIleLysSerCysPheValCys 21			
RESULT 8				
Q5JS06_HUMAN PRELIMINARY;	PRT; 109 AA.			
AC	Q5JS06_HUMAN PRELIMINARY;			
DT	10-MAY-2005 (TREMBLrel. 30, Created)			
DT	13-SEP-2005 (TREMBLrel. 30, Last sequence update)			
DE	Zinc Finger, DHHC domain containing 14 (Fragment).			
GN	ORFName=R3-49LC9.1-003;			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
MM	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;			
HO				
NCBI_TaxID=9606;				
RN	NUCLEOTIDE SEQUENCE.			
RA	Johnson C;			
RL	Submitted (MAY-2005) to the EMBL/GenBank/DDJB databases.			
RN	[2]			
RP	NUCLEOTIDE SEQUENCE.			
RA	Almeida J;			
RL	Submitted (MAY-2005) to the EMBL/GenBank/DDJB databases.			
DR	EMBL; AL43028; CAI39700_1; -; Genomic DNA.			
DR	EMBL; AL132854_1; ; Genomic DNA.			
DR	EMBL; AL133510; CAI39700_1; ; JOINED; Genomic DNA.			
DR	EMBL; AL42854_1; ; JOINED; Genomic_DNA.			
GO	GO:0046872; Protein binding; IBA.			
DR	InterPro; IPR01594; Znf DHHC.			
PFam	PF01529; zf-DHHC; 1.			
ProDom	PS003041; Znf DHHC; 1.			
DR	PROSITE; PS50216; Znf DHHC; 1.			
FT	NON_TER 1_1			
PT	NON_TER 109 AA; 109 MW;			
SQ	SEQUENCE 109 AA; 12147 MW;	415F90439F4866DF CRC64;		
Alignment Scores:				
Pred. No.:	38.6	Length: 109		
Score:	39.00	Matches: 6		
Percent Similarity:	97.5%	Conservative: 1		
Best Local Similarity:	75.0%	Mismatches: 1		
Query Match:	73.6%	Indels: 0		
DB:	2	Gaps: 0		
US-10-717-243-59 (1-28) x Q5JS06_HUMAN (1-109)				
Qy	25 AAAATGAGTCTGTTCACATGT 2			
Db	20 LysLeuLysSerCysPheThrCys 27			
RESULT 9				
Q5Y572_MOUSE PRELIMINARY;	PRT; 253 AA.			
ID	Q5Y572_MOUSE PRELIMINARY;			
AC				
DT	25-OCT-2004 (TREMBLrel. 28, Created)			
DT	25-OCT-2004 (TREMBLrel. 28, Last sequence update)			
RP	PROTEIN SEQUENCE.			
RX	MEDLINE=16006751; PubMed=7553224;			
RA	Rosenblum M.G., Kohn W.A., Beattie K.L., Beattie W.G., Marks W.,			
RA	Toman P.D., Cheung L.;			
RT	"Amino acid sequence analysis, gene construction, cloning, and expression of Gelonin, a toxin derived from <i>Gelonium multiflorum</i> (Euphorbiaceae himalaya). J. Interteron Cytokine Res. 15:54-555 (1995).			
RL	J. Interteron Cytokine Res. 15:54-555 (1995).			
DR	HSSP; P03989; 1MRJ.			
DR	GO; GO:0016787; F-hydrolase activity; IBA.			
DR	GO; GO:0030598; RNA N-glycosylase activity; IBA.			
DR	GO; GO:0006952; P-defense response; IBA.			
DR	GO; GO:0017148; P-negative regulation of protein biosynthesis; IBA.			
DR	GO; GO:0094045; P-pathogenesis; IBA.			
DR	InterPro; IPR01574; RIP.			
PFam	PF00161; RIP.			
DR	PRINTS; PR00346; SHIGARICIN.			
DR	PROSITE; PS00375; SHIGA RICIN.			
KW	Hydrolase; Plant defense; Protein synthesis inhibitor; Toxin.			
SEQUENCE	258 AA; 28826 MW;	13D68E673F4D6B06 CRC64;		
NCBI_TaxID=3979;				
RN				

Alignment Scores:  
 Pred. No.: 41.7  
 Score: 39.00  
 Percent Similarity: 100.0%  
 Best Local Similarity: 100.0%  
 Query Match: 73.6%  
 DB: 2

US-10-717-243-59 (1-28) × Q9S9E1\_GELMU (1-258)

Qy 8 AAAACAAAGACTCATTTGGC 28  
 Db 111 LysthrargleuhiphegIy 117

RESULT 11  
 ID Q5JYHO\_HUMAN PRELIMINARY; PRT; 303 AA.  
 AC Q5JYHO\_HUMAN  
 DT 10-MAY-2005 (TREMBLrel. 30, Created)  
 DT 10-MAY-2005 (TREMBLrel. 30, Last annotation update)  
 DR Zinc finger, DHHC domain containing 18.  
 GN Name=ZDHHC18 ; ORFNames=RPI-500024.3-001;  
 OS Homo sapiens (Human).  
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;  
 OC Homo.  
 RN NCBI\_TaxID=9606;

RN [1]  
 RP NUCLEOTIDE SEQUENCE.

RA Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.

RU EMBL; ALI2480; CAI24624.1.; Genomic DNA.

DR GO; IPR0046872; zinc ion binding; IEA.

DR InterPro; IPR003096; Ig\_MHC.

DR ProDom; PD003041; Zinc\_finger\_1.

DR PROSITE; PS00290; Ig\_MHC; UNKNOWN\_1.

DR PROSITE; PS00216; ZF\_DHHC\_1.

DR Sequence; C13A27BF2C6C22BS; CRC64;

DB: 303 AA; 33367 MW; 245B6C727CBA3AEA CRC64;

Alignment Scores:  
 Pred. No.: 42.3  
 Score: 39.00  
 Percent Similarity: 87.5%  
 Best Local Similarity: 75.0%  
 Query Match: 73.6%  
 DB: 2

US-10-717-243-59 (1-28) × Q5JYHO\_HUMAN (1-303)

Qy 25 AAAATGAGTCCTGTTCACATGT 2  
 Db 105 LysLeuWlyStyrycSphathrcyS 112

RESULT 12  
 ID Q7PQ26\_ANOGA PRELIMINARY; PRT; 305 AA.  
 AC Q7PQ26  
 DT 01-MAR-2004 (TREMBLrel. 26, Created)  
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)  
 DR ONSMARG000009967 (Fragment).

GN ORFNames=ENSANGGG000000747;

OS Anopheles gambiae str. PEST.

OC Neoptera; Endopterygota; Diptera; Nematoeca; Culicoides; Culicidae;

OC Anopheinae; Anopheles.

OC NCBITaxID=18045;

RN [1]  
 RP NUCLEOTIDE SEQUENCE.

RC STRAIN=PEST;  
 RG The Anopheles gambiae Sequence Committee;  
 RT "Anopheles gambiae re-annotation";  
 RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.  
 RN [2]  
 RP NUCLEOTIDE SEQUENCE.  
 RC STRAIN=PEST;  
 RG The Anopheles gambiae Sequence Committee;  
 RL Submitted (APR-2004) to the EMBL/GenBank/DBJ databases.  
 CC -1 - CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.  
 DR EMBL; AAAB01008900; EAA0399.3.; Genomic\_DNA.  
 DR GO; GO:0016872; F:metal ion binding; IEA.  
 DR InterPro; IPR001594; Znf\_DHHC.  
 DR Pfam; PF01529; zf-DHHC; I.  
 DR PROSITE; PS50216; ZF\_DHHC; 1.  
 DR FT NON\_TER 305 305  
 SQ SEQUENCE 305 AA; 34257 MW; 245B6C727CBA3AEA CRC64;  
 Alignment Scores:  
 Pred. No.: 42.4  
 Score: 39.00  
 Percent Similarity: 87.5%  
 Best Local Similarity: 75.0%  
 Query Match: 73.6%  
 DB: 2  
 Length: 305  
 Matches: 6  
 Conservative: 1  
 Mismatches: 1  
 Indels: 0  
 Gaps: 0

US-10-717-243-59 (1-28) × Q7PQ26\_ANOGA (1-305)

Qy 1 25 AAAATGAGTCCTGTTCACATGT 2  
 Db 134 LysLeuWlyStyrycSphathrcyS 141

RESULT 13  
 ID Q4SGG7\_TETNG PRELIMINARY; PRT; 329 AA.  
 AC Q4SGG7;  
 DT 13-SEP-2005 (TREMBLrel. 31, Created)  
 DT 13-SEP-2005 (TREMBLrel. 31, Last sequence update)  
 DT 13-SEP-2005 (TREMBLrel. 31, Last annotation update)  
 DE Chromosome undetermined SCAF14594, whole genome shotgun sequence.  
 DE (Fragment).  
 ORFNames=GSTENG0018646001;  
 OS Tetraodon nigroviridis (Green puffer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrates; Euteleostomi;  
 OC Actinopterygii; Neopercidae; Teleostei; Euteleostei; Neoteleostei;  
 OC Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;  
 OC Tetradontoides; Tetraodontidae; Tetraodontidae; Tetraodon.  
 NCBI\_TaxID=9883;

RN [1]  
 RP NUCLEOTIDE SEQUENCE.  
 RA Jaiillon O., Auty J.M., Brunet F., Petit J.L., Stange-Thomann N.,  
 RA Mauceli E., Bouneau L., Fischer C., Ozouf-Cozar C., Bernot A.,  
 RA Nicaud S., Jaffee D., Fisher S., Lutfalla G., Dosset C., Segurens B.,  
 RA Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,  
 RA Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,  
 RA Biemont C., Skalli Z., Cattolico L., Poulaing J., De Berardinis V.,  
 RA Cruaud C., Duprat S., Broto P., Coutanceau J.P., Gouzy J.,  
 RA Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,  
 RA Kellici M., Wolff J.N., Guigo R., Zody M.C., Mesirov J.,  
 RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,  
 RA Laudet V., Schachter V., Quétier P., Saurin W., Scarpa L.,  
 RA Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.,  
 RT Genomic duplication in the teleost fish Tetraodon nigroviridis reveals  
 RT the early vertebrate proto-karyotype.";  
 RT Nature 431:946-957(2004).  
 RN [2]  
 RP NUCLEOTIDE SEQUENCE.  
 RG Genoscope; Whitehead Institute Centre for Genome Research;  
 RL Submitted (FEB-2004) to the EMBL/GenBank/DBJ databases.  
 CC -1 - CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is

CC Preliminary data.  
 EMBL; CAAE0104594 ; CAG00265..1.; - ; Genomic\_DNA.  
 DT NON\_TER 329 ; 329 ; MN; B045DCCE5541E538 CRC64;  
 SQ SEQUENCE 329 AA; 36192 MW;

Alignment Scores:  
 Pred. No.: 42.7 Length: 329  
 Score: 39.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0% Mismatches: 1  
 Query Match: 73.6% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x Q4SGG7\_TETNG (1-329)

Qy 25 AAAATGAACTCTGTTCATGT 2  
 Db 124 LysleuIystYcrsPheThrCys 131

RESULT 14

Q5JS05 HUMAN  
 Q5JS05\_HUMAN PRELIMINARY; PRT; 371 AA.

AC 10-MAY-2005 (TREMBLrel. 30, Created)  
 DT 10-MAY-2005 (TREMBLrel. 30, Last sequence update)  
 DE 13-SEP-2005 (TREMBLrel. 31, Last annotation update)  
 Zinc finger, DHHC domain containing 14 (Fragment).  
 ORFnames:RP3-481C9.1-002;  
 OS Homo sapiens (Human).  
 Homologs: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominoidea;  
 Homo  
 NCBI\_TAXID=9606;

[1]

NCB1\_TAXID=9606;

RP NUCLEOTIDE SEQUENCE.  
 RA Almeida J.; Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.  
 RN [2]

RN NUCLEOTIDE SEQUENCE.  
 RA Almeida J.; Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.  
 RN [2]

RP NUCLEOTIDE SEQUENCE.  
 RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.  
 EMBL; AL450348; CAI39701..1; - ; Genomic\_DNA.  
 EMBL; AL1333510; CAI42835..1; - ; Genomic\_DNA.  
 EMBL; AL1333510; CAI39701..1; JOINED; Genomic\_DNA.  
 EMBL; AL450348; CAI4835..1; JOINED; Genomic\_DNA.  
 GO; GO:0046872; F:metal ion binding; IEA.  
 InterPro; IPR001594; Znf DHHC.  
 Pfam; PF01529; zf-DHHC; I.  
 PRODOM; PD003041; Znf DHHC; 1.  
 PROSITE; PS50216; ZF DHHC; 1.

US-10-717-243-59 (1-28) x Q5JS05\_MOUSE (1-384)

Qy 25 AAAATGAACTCTGTTCATGT 2  
 Db 58 LysleuIystYcrsPheThrCys 65

Search completed: February 17, 2006, 09:51:29  
 Job time : 150.5 secs

CC 01-MAR-2004 (TREMBLrel. 26, Last annotation update)  
 DE NEW! domain containing protein.  
 GN Name=Zdhhc14;  
 OS Mus musculus (Mouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 RN [1]

RC NUCLEOTIDE SEQUENCE.  
 STRAIN=BALB/c; TISSUE=Adipose;  
 RA Guo J.H.; Chen L.; Yu L.;  
 RL Submitted (AUG-2002) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AF542387; AAN47441..1; - ; mRNA.  
 DR Ensembl; ENSEMBL000034265; Mus musculus.  
 DR MGII; MGII:2633229; Zdhhc14.  
 DR GO; GO:0016021; C:integral to membrane; IEA.  
 DR GO; GO:0046872; F:metal ion binding; IEA.  
 DR InterPro; IPR001594; Znf DHHC.  
 DR Pfam; PF01529; zf-DHHC; I.  
 DR PRODOM; PD003041; Znf DHHC; 1.  
 DR PROSITE; PS50216; ZF DHHC; 1.

SQ SEQUENCE 384 AA; 41836 MW; 5E1BB23A2B2A9B CRC64;

Alignment Scores:  
 Pred. No.: 43.3 Length: 384  
 Score: 39.00 Matches: 6  
 Percent Similarity: 87.5% Conservative: 1  
 Best Local Similarity: 75.0% Mismatches: 1  
 Query Match: 73.6% Indels: 0  
 DB: 2 Gaps: 0

US-10-717-243-59 (1-28) x Q5CFN0\_MOUSE (1-371)

Qy 25 AAAATGAACTCTGTTCATGT 2  
 Db 46 LysleuIystYcrsPheThrCys 53

RESULT 15

Q5CFN0 MOUSE  
 Q5CFN0\_MOUSE PRELIMINARY;  
 AC Q5CFN0;  
 DT 01-MAR-2003 (TREMBLrel. 23, Created)  
 DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)